

IN THE UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF GEORGIA
ALBANY DIVISION

MICHAEL NEWCOMB and KATHY NEWCOMB,	:	NO.
	:	1:15-CV-00080-
	:	LJA
Plaintiffs	:	
vs.	:	
	:	
SPRING CREEK COOLER, INC.;	:	
SPRING CREEK PRODUCE, LLC; SF	:	
F FARMS, INC.; SF EXPORTS, INC.;	:	
T&L FARMS, INC.; TERRIL SCOTT	:	
PROPERTIES, LLC; TERRIL SCOTT	:	
F FARMS, LLC; WALDINE B. SCOTT	:	
F FARMS, LLC; EDDIE T. SCOTT	:	
F FARMS, LLC; TS EQUIPMENT	:	
LEASING, LLC; L&W FARMS, LP;	:	
TERRIL SCOTT; and JOHN DOE,	:	
Name Unknown, Address Unknown	:	
	:	
Defendants	:	

VIDEOTAPE DEPOSITION OF WILLIAM J. AZEREDO, M.D.

Taken in the offices of William Azeredo, M.D., 100 North Academy Avenue, Danville, Pennsylvania, on Thursday, February 16, 2017, commencing at 8:16 a.m., before Justine Starrick, Registered Professional Reporter, Tim Art, Videographer.

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GALLAGHER REPORTING & VIDEO, LLC
Mill Run Office Center
1275 Glenlivet Drive, Suite 100
Allentown, PA 18106

(610) 439-0504 / (800) 366-2980

Gallagherreporting@verizon.net

1 APPEARANCES:

2
3 THE HELMS LAW FIRM
4 By: J. JEFFREY HELMS, ESQ.
P.O. Box 537
10 North College Street
Homerville, GA 31634
Jeffhelms@helmslaw.com
-- For the Plaintiffs

5
6
7 GARDNER WILLIS SWEAT PLAIRE & PICKETT
By: MARK L. PICKETT, ESQ.
8 P.O. Drawer 71788
2408 Westgate Drive
9 Albany, GA 31707
mark.pickett@gwsplaw.com
10 -- For the Defendants

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1	INDEX TO WITNESS	
2	THE WITNESS	PAGE
3	William Azeredo	
4	By Mr. Helms (Direct)	5
5	By Mr. Pickett (Cross)	44
6	By Mr. Helms (Redirect)	61

5	INDEX TO EXHIBITS		
6	EXHIBIT	DESCRIPTION	PAGE
7	1	Diagram	15

1 THE VIDEOGRAPHER: The date today is
2 February 16, 2017. The time is 8:16 a.m. This is
3 the videotape deposition of William J. Azeredo,
4 M.D., taken in the matter of Michael Newcomb and
5 Kathy Newcomb versus Spring Creek Cooler, Inc., et
6 al, filed in the United States District Court Middle
7 District of Georgia, Albany division, case number
8 1:15-CV-00080-LJA.

This deposition is being held at 100
North Academy Avenue in Danville, Pennsylvania. My
name is Tim Art and I am the videographer. I am
with Gallagher Reporting and Video. The court
reporter is Justine Starrick. At this time will
counsel please state their appearances for the
record, after which the court reporter may swear in
the deponent.

17 MR. HELMS: Jeff Helms, and I'm here
18 for Mr. Michael Newcomb and Ms. Kathy Newcomb.

19 MR. PICKETT: I'm Mark Pickett, and I
20 represent Spring Creek Cooler as well as the other
21 defendants in this case.

* * *

23 WILLIAM J. AZEREDO, M.D., having been
24 duly sworn, was examined and testified as follows:

* * *

1 DIRECT EXAMINATION

2 * * * *

3 BY MR. HELMS:

4 Q. Doctor, I'm Jeff Helms. We met earlier and
5 talked before we got going with this deposition.
6 We're going to ask you some questions. And this is
7 a videotape deposition taken here in Danville,
8 correct?

9 A. Uh-huh.

10 Q. I'm going to ask you to tell the jury about
11 your experience with Mr. Newcomb as his physician,
12 okay.

13 A. Uh-huh.

14 Q. Now, let's get started by you telling the
15 jury your full name please, sir.

16 A. William James Azereedo.

17 Q. And, Doctor, you are a medical doctor?

18 A. Correct.

19 Q. You have a specialty in the medical field?

20 A. Uh-huh.

21 Q. What specialty is that?

22 A. Otolaryngology.

23 Q. That's a big word. Tell us what that
24 means.

25 A. Ear, nose, and throat.

1 Q. Are you also a surgeon as an
2 otolaryngology?

3 A. It is a surgical subspecialty, so, yes.

4 Q. Please tell the jury briefly your
5 educational background in order to become the doctor
6 that you are now?

7 A. Sure. It's four years of medical school,
8 and five years of residency. That's it.

9 Q. Board certified?

10 A. Absolutely.

11 Q. We've talked with other doctors the last
12 couple of days about board certification, but if you
13 could also explain to the jury what it means to be
14 board certified as an otolaryngologist?

15 A. Sure. Once you complete your residency in
16 your first year out you take your boards, which is a
17 two part exam, one day written, one day oral boards,
18 and a percentage of people pass that exam. And if
19 you pass that exam you go from being board eligible,
20 which means you've graduated from your residency, to
21 board certified. So it means you've not only gone
22 through the education, but demonstrated you have
23 sufficient knowledge.

24 Q. And this is a national test that's given to
25 everybody?

1 A. Absolutely. It's a standardized national
2 test.

3 Q. It's a certification that you have a
4 certain competency of otolaryngology that otherwise
5 you wouldn't have, is that right?

6 A. Yes, it's like having a national bar.

7 Q. I understand. Thank you. Where do you
8 practice right now?

9 A. Here in Geisinger.

10 Q. And Geisinger is a -- appears to be a
11 fairly large medical complex?

12 A. It's a large medical system that serves
13 roughly one-third of the State of Pennsylvania.

14 Q. During the course of your practice here
15 have you had the opportunity to examine and treat
16 and operate upon a gentleman by the name of Michael
17 Newcomb?

18 A. Yes.

19 Q. How did you first meet him and how did he
20 come into your care?

21 A. He came in with an ear complaint of altered
22 hearing on his left ear, and in the course of his
23 evaluation found that while the complaints were a
24 bit unusual, they in no small part seem to
25 ultimately be a pulsatile sound in the ear,

1 difficulty hearing with a relatively normal looking
2 exam. And concern was raised for fluid behind the
3 drum given his past history.

4 Q. And the history is?

5 A. With three years in between plus since I've
6 seen him, he had come in after the fact after a
7 trauma. He still had healing lacerations on the
8 side of his head. And this postdated that trauma.

9 Q. You said he had lacerations on his head.
10 Do you mean he had -- did you see evidence of a scar
11 on top of his head?

12 A. Well, yeah, superior to his ear, they were
13 healing lacerations.

14 Q. When you say superior to his ear?

15 A. Above his ear in this area. (Indicating.)

16 Q. Left side?

17 A. Correct.

18 Q. There was a CT scan that talked about a
19 complete --

20 A. Opacification.

21 Q. Opacification?

22 A. Uh-huh.

23 Q. Was that relevant to your diagnosis of his
24 problem at all?

25 A. In general opacification means -- well, to

1 back up, it means opacification of air cells that
2 exist in the bone behind the ear called the mastoid.
3 And those air cells connect with a space behind the
4 eardrum. And he had fluid on that CT scan both
5 behind -- or soft tissue density material,
6 opacification, behind the eardrum and in these air
7 cells.

8 And on a CT scan that means it's not
9 air as it's supposed to be, it's something else.
10 And the options are inflammation, soft tissue,
11 fluid, or some combination thereof.

12 Q. So after you saw him he was complaining
13 about I think a fullness in his left ear, is that
14 right, what is that --

15 A. Among his complaints, plugged feeling, oral
16 fullness is a more technical term for it, and
17 altered sense of hearing.

18 Q. Ultimately what did you find out what was
19 wrong with the gentleman?

20 A. Well, after we did a myringotomy.

21 Q. Tell us what a myringotomy --

22 A. Which is making a small incision in the
23 eardrum after putting topical numbing paint on the
24 eardrum. He was found to have fluid on the eardrum.
25 As it was somewhat pulsatile and clear this was

1 concerning for CSF. Because any typical fluid
2 behind the eardrum is not clear and not pulsatile.
3 So we sent it off for a protein that is functionally
4 only found in CSF, which is fluid that bathes the
5 brain and spinal cord.

6 Q. And during the course of the deposition I'm
7 going to interrupt you every once in a while when
8 you use certain words I'll need a definition and the
9 jury will too. Okay?

10 A. I'll try to explain any technical terms I
11 use, but otherwise feel free.

12 Q. Pulsatile?

13 A. Means a pulsing sound. So I used it twice
14 already, pulsatile tinnitus is a pulsing sound in
15 the ear. To have fluid pulse is what you would
16 imagine if you had something underneath and you had
17 a hole and had fluid come up and you had something
18 that would sort of be a pump underneath, you would
19 see it well up a little bit and go back down.

20 Q. That's something you could observe?

21 A. With a microscope, yeah. When we make
22 these incisions it's all with an operating
23 microscope in clinic so we could see it pretty
24 easily.

25 Q. Even to get the fluid off his ear it's with

1 a microscope and you have to stick it in his ear, is
2 that right?

3 A. I'm sorry, stick what in there?

4 Q. The needle to get the fluid out?

5 A. Well, the way we do it is we make a small
6 incision with a -- it's called a myringotomy knife.
7 It's just a small blade, and a patch that we've
8 numbed up on the eardrum. And through that we could
9 see fluid come up and then we suction it out and
10 collect it to send it off if we're concerned about
11 it being CSF.

12 Q. And CFS is?

13 A. CSF, is, again, fluid that bathes the brain
14 and spinal cord. It's an acronym for cerebral
15 spinal fluid.

16 Q. And that's what it was behind his ear, his
17 eardrum?

18 A. Correct. Because the lab was positive. So
19 that is basically the diagnosis.

20 Q. What did that indicate to you at that point
21 then, what his problem was?

22 A. He had a CSF leak, and that's why he had
23 fluid behind his eardrum and in his mastoid air
24 cells, again, this bone is the mastoid. And
25 unfortunately at that point it's not a medical

1 issue, it's a surgical issue. (Indicating.)

2 Q. You scheduled surgery for him?

3 A. Correct.

4 Q. And you also asked a neurosurgeon to assist
5 in the surgery, is that right?

6 A. Uh-huh.

7 Q. And what doctor was that?

8 A. Dr. Toms.

9 Q. Is he a colleague of yours here at
10 Geisinger?

11 A. He's now not here, he's moved on, but he
12 was a colleague of mine, yes.

13 Q. Had he assisted you before in surgeries?

14 A. Oh, yes, and subsequently. We did many of
15 these together. By that I mean, all the ones that
16 we came across, more than we would like to do
17 because we would like to do none and people
18 obviously not have a CSF leak.

19 Q. Technically what was the nature of the
20 surgery that you recommended for Mr. Newcomb?

21 A. Middle fossa craniotomy with repair of CSF
22 leak with tragal cartilage graft and myofacial flap.

23 Q. All right. And when you and Dr. Toms were
24 performing this surgery, did you stay in the OR room
25 with him and he stayed in the OR room with you and

1 you all worked together, or did you come in and out,
2 or how did that work?

3 A. I was there for the entire time. He was
4 there for placement of the lumbar drain and he came
5 in to see if there were any issues, there weren't.
6 And then at one point we found an encephalocele,
7 which is basically a small nonviable portion of the
8 brain herniating into the ear space. And I had him
9 remove that basically bipolar, which is cautery
10 between two tips so it's all focal and not spread,
11 the electric current from the cautery. And then he
12 attempted repair of the dura. But the dura is the
13 tough stuff, the tougher layer that covers the
14 brain. But it was thinned out to the point where
15 that wasn't productive so then proceeded with the
16 repair of the defect in the skull base.

17 Q. How many times before Mr. Newcomb do you
18 think you worked with Dr. Toms doing something like
19 that?

20 A. I honestly don't remember, but more than
21 once.

22 Q. And you worked with him subsequently after
23 Mr. Newcomb on similar surgeries?

24 A. Yes. At least a dozen to 15 times.

25 Q. So you all were in the operating room

1 working as a team really?

2 A. Uh-huh.

3 Q. I think we're to the point right now that
4 earlier I had sent to you a medical illustration,
5 is that right?

6 A. Uh-huh.

7 Q. You've had a chance to review that?

8 A. Yes.

9 Q. Is it a reasonable, accurate representation
10 of the human anatomy for Mr. Newcomb?

11 A. It's reasonable, yes.

12 Q. And does it give a reasonable depiction of
13 the surgical process that you all undertook?

14 A. It's illustrative, yes.

15 Q. And would that illustration help you
16 explain your testimony to the jury?

17 A. Sure.

18 Q. Doctor, if we could, and I'm going to pick
19 this up and bring it over to you, this is going to
20 be marked as Plaintiff Exhibit Number 1 to the
21 deposition. I want you to use this illustration if
22 you could to kind of walk the jury through first of
23 all the anatomy and what we're talking about, and
24 then the process of the surgery.

25 A. Do you want me to hold it or are you going

1 to hold it?

2 Q. I'll hold it for you.

3 A. This is what's called a coronal view. By
4 that it's a cut this way, so here is the brain.
5 This is the spinal cord here. The left ear would be
6 here. And you could see that the balance system is
7 here. That's the organ of hearing called the
8 cochlea. Here is the eardrum. And the space behind
9 the eardrum is here that we were talking about.

10 (Indicating.)

11 The mastoid area I was talking about,
12 which is posterior to the ear canal, would be deep
13 to the plane of this board. But remember, those are
14 filled with air cells that are contiguous with the
15 space behind the eardrum. This is the lateral skull
16 here. And this area here is what I was referring to
17 as the lateral skull base or just skull base for the
18 purposes of this case. And that is the bony
19 separation between the brain space and the ear
20 space. And basically pertinent to this case this
21 represents an encephalocele, which is a small
22 herniation of brain through a defect in the skull
23 base. (Indicating.)

24 Q. When you say a defect in the skull base, is
25 that what walking around folks would say a fracture

1 in the skull base?

2 A. It could be. But some people do have
3 natural defects in the skull base. So I view it as
4 just for all purposes regardless of whether it was
5 acquired or congenital or acquired from trauma or
6 not just a defect for generic term.

7 Q. But it's part of the skull though, that
8 bony part right there?

9 A. Yes, it's supposed to be a complete bone
10 plate, that's considered the normal state.

11 Q. All right, sir. And when you say the
12 encephalocele, it was a herniation the brain tissue
13 was just --

14 A. It doesn't have to be brain per se, but it
15 could also be the lining covering it. It's
16 basically contents from this space, so that includes
17 dura, meninges, doesn't have to be actual brain.
18 That would be a meningeal myelocele. But this is an
19 encephalocele, this is contents from this space
20 herniating through there. With that that would be
21 the suspected obvious site of the leak of fluid, the
22 CSF that we talked about earlier.

23 Q. And this is a serious condition for a
24 patient to have, isn't it?

25 A. We don't undertake this surgery, you know,

1 lightly. We do this because we have to. We do this
2 because anybody that has a CSF leak is at risk of
3 developing meningitis, which can be extremely
4 significant.

5 Q. And that was my question. How would the
6 meningitis come around, what would be the process,
7 if he got meningitis if this had not been repaired,
8 say, for instance, how does that work, what's the
9 fear?

10 A. Well, anybody with an ear infection or any
11 sort of -- you have an unnatural communication
12 between the CSF space which is essentially immune
13 sacred area, now in communication with the outside
14 world because the space behind the eardrum
15 ultimately through the eustachian tube, which is
16 somewhat drawn in here, connects to the space behind
17 the nose. And while this is a clean space, it
18 doesn't have to be clean and it's the same concern
19 whether it were a leak through the nose in the
20 anterior skull base or the lateral skull base.
21 You're not supposed to have that communication. So
22 it's basically something that needs to be repaired.

23 Q. Simplified, does it mean that bacteria
24 could come up through that leak and get up inside
25 the brain?

1 MR. PICKETT: Object to leading.

2 THE WITNESS: I'm sorry?

3 MR. PICKETT: I object to leading.

4 A. Essentially meningitis is an infection of
5 the meninges, the lining covering the brain, and
6 it's the concern, meningitis. It's basically as I
7 explained an unnatural pathway by which an infection
8 could track to the brain space.

9 MR. PICKETT: Could we go off the
10 record for a second.

11 THE VIDEOGRAPHER: Time is 8:33, we
12 are going off the video record.

13 (Discussion held off the record.)

14 THE VIDEOGRAPHER: The time is 8:34,
15 we are back on the video record.

16 BY MR. HELMS:

17 Q. Doctor, in terms that maybe we could
18 understand, explain to us how meningitis would be a
19 danger in this case and what would be the process of
20 how it would occur, how it would enter and get to
21 the brain?

22 A. Well, one, I can't guarantee that if you
23 have a CSF leak you're going to get meningitis. The
24 problem is you're at risk for it, and once you've
25 identified the risk it's not -- as long as you're

1 healthy enough to undergo the surgery, it's not
2 considered an option to leave it alone.

3 Q. All right.

4 A. Unless a patient so choose understanding
5 the risks of meningitis or even worse brain abscess
6 and what the chances are of being who you were
7 before and after such an episode. But the fear
8 would be bacterial meningitis based on the location.

9 Q. And how would the bacteria enter the ear
10 and get into the brain?

11 A. And, again, if you had an ear infection,
12 the space behind your eardrum, that type of ear
13 infection, I'm not talking about something shallow
14 to the eardrum, but in the middle ear, which is the
15 volume between the eardrum and the inner ear, which
16 is the organ of hearing and balance, it's not
17 uncommon for people to have an infection. And if
18 you have an unnatural communication between that
19 space, and with that I include the mastoid, then you
20 have a much higher risk than the average patient
21 would have of developing an infection tracking into
22 this space. And the first and most significant risk
23 is that of meningitis.

24 Q. All right, sir. Thank you. Okay. Moving
25 on then I think you have identified the condition

1 that Mr. Newcomb had. If you could just maybe --
2 well, over here it's got a drain, and that was done
3 -- recommended by Dr. Toms. Can you explain to the
4 injury why you do that in a surgery like this?

5 A. Sure. And to clarify I don't do this,
6 neurosurgery does this. It's in part -- for this
7 particular case it's to take some of the fluid out
8 of that space to basically create more room because
9 the fluid in question is between the dura here and
10 the brain and you're trying -- if you're making a
11 window into this space you want to have an easier
12 time visualizing this area, and there would be less
13 retraction of the brain in that circumstance. You
14 also use certain medications to also reduce that
15 pressure inside that space. (Indicating.)

16 So it's partly for visualization
17 during the case and keeping patients safe. The
18 second part has to do with post-op care and letting
19 the grafts and flap we put in there basically not
20 have the added pressure and you release some of the
21 CSF over so many hours to reduce that pressure. As
22 you questioned earlier, we produce plenty of CSF, so
23 it's not a question of running out of CSF. You just
24 reduce the volume, and it's in a monitored setting.

25 And in cases outside of this in

1 general we use a lumbar drain because most people
2 who have these types of leaks they're spontaneous
3 not acquired from some form of trauma. And in those
4 patients it gets to trying to determine an
5 underlying diagnosis for those patients with
6 spontaneous leaks.

7 Q. Just one question, the drain, how is it --
8 what is used to put the drain in?

9 A. Well, this is -- these are a series of
10 questions that are probably best asked of the
11 neurosurgeon involved rather than me. But in
12 general there's a trochar, you basically are trying
13 to get between the vertebra.

14 Q. A trochar?

15 A. Basically a long needle with an open bore
16 once you have it in there. So it's got a stylet to
17 keep it so you don't bring any tissue into it, and
18 you take the stylet out. These aren't technical
19 terms I'm sure, because I'm not a neurosurgeon.

20 Q. But you understand the process?

21 A. Yes. And they basically identify that
22 they're in the fluid space between the spinal or
23 inferior to the spinal cord and the dura covering
24 that area. And once they're in there they thread a
25 catheter through that trochar and thread it into

1 that space. Obviously this is done sterilely and
2 they basically suture it so it can't be pulled out.
3 And then you have this tubing essentially in the
4 same space that this is. (Indicating.)

5 So CSF is cerebral spinal fluid. So
6 whether you're accessing here or here, you're
7 reducing the pressure in this area by draining it
8 out there. (Indicating.)

9 Q. So it's a catheter stuck into the spine
10 inside the spinal column to drain the fluid out?

11 MR. PICKETT: Objection, leading.

12 Q. Is that a --

13 A. I wouldn't use those terms. It's basically
14 into -- the spinal cord runs through the center of
15 the spinal column and it's between two facets here
16 where if someone is bent you could access it better.
17 And you're trying to -- think of it -- the best way
18 to think of it, it's the same approach as would be
19 done for an epidural for a pregnant female if she
20 was going to have an epidural during labor, except
21 rather than being superficial to the dura, epidural,
22 it's through dura, so you're into the CSF space.

23 Q. All right. If you'll move forward, and I
24 think down at the bottom left begins the process of
25 how the surgery gets going.

1 A. Okay.

2 Q. If you could walk the jury through the
3 incision that you make.

4 A. Sure.

5 Q. There's a notation about the cartilage, why
6 is that important in this case? We'll get to that.

7 A. Okay. I'll cover that.

8 Q. Yeah.

9 A. Basically the incision, since we tend to
10 care, we try and hide the scar as much as possible,
11 we do a standard ear incision, which is just
12 posterior to the connection between the ear and the
13 side of the skull, so it's actually closer to the
14 ear so you can't see it. And right above the helix
15 here, or the root of the ear, it kind of comes
16 straight up about a centimeter or two centimeters.
17 So because we need to access here to get to there.
18 So basically this hides the incision well, it would
19 all be in the hair. It's all just cosmetic. Other
20 people do these flaps differently. This isn't --
21 there's no one way to do this. (Indicating.)

22 Q. Assuming you've got hair to cover it?

23 A. Even if you don't, you're still a lot
24 happier with a scar that if I looked at you straight
25 on you wouldn't see, versus a big C shape flap here.

1 (Indicating.)

2 Q. I got you.

3 A. So basically secondarily this little
4 cartilage nub here is called the tragus. And that
5 is an excellent source of graft material to fill
6 defects, because cartilage tends to be stable and
7 not go away as readily as just a bone graft would.
8 And it's malleable and you could cut it to fit the
9 size of a defect a little bit, and it has a natural
10 connective tissue layer covering it, the
11 perichondrium. So you also have attached to it a
12 connective tissue, little flap, to help hold it in
13 place, secure it, and also help cover further area.

14 So through a separate small incision
15 on the axis of the tragus we basically tunnel down
16 to the cartilage and the perichondrium and snip that
17 piece out and close it. It looks the same, it's
18 just we warn the patient, it'll be a little bit
19 floppier than it used to be, but no one will look at
20 that and notice.

21 Q. Okay.

22 A. But obviously if you have a CSF leak you're
23 more concerned about repairing the leak.

24 Q. Did you use that, that plug that you pull
25 out of there for placing it inside his --

1 A. Well, it's a graft, it has no blood supply.
2 And that's one of the layers we use to basically
3 fill the defect in the skull base.

4 Q. All right.

5 A. But this implies we did this at first. And
6 sometimes we do, because we pretty much always use
7 it, but we actually in his case did it later so I
8 could have a sense of the size of the defect so I
9 knew how much cartilage I would need.

10 Q. You mean once with you got inside and
11 looked at it?

12 A. Once we knew -- yeah, because it's all in
13 the prepped area, it's not like a reboot. It's,
14 okay, now we know what side we need, let's harvest
15 the graft.

16 Q. That makes sense. Okay. Continue on, and
17 using this illustration if you could.

18 A. So once we make this incision we basically
19 are down to the connective tissue that covers this
20 big muscle here called the temporalis muscle. And
21 we basically harvest a sort of tongue shaped flap of
22 that connective tissue and a thin veneer of the
23 muscle attached to it so it has some substance.
24 It's basically a flap here and pedicled on the blood
25 supply here. And we basically roll it back here and

1 cover it with saline covered gauze to protect it
2 during the case. And then we come down through that
3 muscle in the connective tissue here to visualize
4 the skull as you see here. (Indicting.)

5 And then we tend to make -- there
6 isn't one particular way to do this, but basically
7 you make a window in the skull, we make a small
8 window, probably because -- most likely because
9 we're ear surgeons and we don't like big window and
10 we're used to small spaces, and that lets us see the
11 dural covering, which is this white here.

12 (Indicating.)

13 Q. Let me stop you.

14 MR. HELMS: Are you able to get this
15 okay? I just wanted to make sure he's picking it up
16 on the video.

17 A. And understand, our patient isn't sitting
18 up. So they're like this. So our view is all under
19 a microscope by the way. So we're looking at this
20 interface between the dura and the skull base here.
21 So we basically still have a little bit to tunnel
22 down here. And we gently lift the dura up. And if
23 you see some small defects you could identify them
24 at this point. And you basically keep coming more
25 medially toward the middle of the skull and trying

1 to identify the entire lateral -- from the ear
2 perspective tegmen. So cut that area of bone
3 separating ear from brain, both covering the space
4 behind the eardrum, the middle ear, and posterior to
5 it, that covering, the mastoid, that bony separation
6 between ear and brain. Okay.

7 Q. Okay.

8 A. So as we do that then in his particular
9 case we encountered this encephalocele. We didn't
10 know he necessarily had one up front, it's just he
11 had a defect, you're always prepared for that. Once
12 that was encountered, as I mentioned earlier,
13 Dr. Toms came in and basically bipolared that stock,
14 because this is nonviable tissue at that juncture.

15 Q. When you say nonviable, it had had blood
16 supply and it's dead?

17 A. It's nonfunctional in terms of any neural
18 activity, it's basically a stock. If it had any
19 actual brain in it per se, because again
20 encephalocele doesn't necessarily mean there's brain
21 in there. But the bottom line is if you pull it out
22 it doesn't pull out well. And, two, there's no
23 great reason to, you just basically separate it off
24 safely so you have that defect there.

25 Q. In hernia cases I've heard of them talk

1 about, doctors talk about muscle tissue or organs
2 being incarcerated, is that the same thing?

3 A. What kind of hernia, you mean like an
4 inguinal hernia?

5 Q. Yes. Is that similar to that or is that --
6 is that something that just --

7 A. Incarcerated implies it's pinched off.

8 Q. Yeah.

9 A. I suppose you could say it that way, but
10 it's not helpful in this case. It's if it comes
11 through it doesn't have much of a blood supply and
12 it's non-functional at that point any way. This
13 wasn't a large encephalocele, you just want to make
14 sure you separated it off and don't just pull up.

15 Q. I got you. Okay.

16 A. So at that point for Mr. Newcomb's case
17 Dr. Toms attempted to repair the dura in that site,
18 but it was to thread bare, as it typically is in
19 these cases, it wasn't worth trying to repair,
20 there's nothing to repair.

21 Q. And when you say dura, explain to us again.

22 A. Again, it's the tougher layer, this white
23 layer that cover the brain and the meninges.

24 Q. Meninges?

25 A. The delicate lining that covers the brain.

1 We used that the term before relative to the term
2 meningitis, which is an infection of that lining.

3 Q. Okay.

4 A. So basically at that point then, you know,
5 you want to make sure you've identified every spot
6 where fluid could leak through. And once you've
7 done that as thoroughly as you can and figure any
8 further risk outweighs the benefit, then you
9 undertake the patching of the holes to put it
10 simply. And smaller ones you can use bone wax,
11 which is similar to paraffin, totally inert, just to
12 fill it. The one where the encephalocele was though
13 was larger and we used that cartilage we harvested
14 from here for that. (Indicating.)

15 And then after that that flap that I
16 talked about before, which would have been over here
17 now, we basically turned over to cover this area.
18 And the idea in general is to have more than one
19 layer plugging these things. So now with the
20 cartilage, the bone wax, and then the connective
21 tissue covering that cartilage, consider that one
22 layer, and then you have this other layer of
23 connective tissue with a muscle, that has muscle on
24 it, covering all of it. And then we use tissue glue
25 to hold it in place. And then we place the bone

1 back on and close.

2 Q. You just cut a little plate of the skull
3 out?

4 A. Uh-huh.

5 Q. Set it aside?

6 A. Sterilely of course.

7 Q. And how is that -- how is it placed back in
8 there?

9 A. We use mini plates basically, titanium
10 plates to hold it to the adjacent skull.

11 Q. So you put another -- is that a titanium
12 plate you replace that with?

13 A. We try and use the same bone, but it's such
14 a small hole, honestly, you could use a titanium
15 plate and not use the bone.

16 Q. Did you use a titanium plate in this case
17 versus a bone?

18 A. I can't remember specifically because I
19 haven't read my OR report for over three years.

20 Q. Okay.

21 A. But if I didn't use the residual bone it
22 was because it was so small and it wasn't worth it,
23 because screwing the plate into the bone -- so you
24 have to tell me whether I did or didn't. There's
25 sometimes where the bone is so thin and it's -- as

1 you try and put a screw in it it fractures anyway
2 that you put a larger titanium plate covering it.
3 And it's a small enough defect that honestly you
4 probably wouldn't have to use anything, but would
5 rather have something on there.

6 Q. I've got you our op note here. Would you
7 be able to take a look at it real quick?

8 A. Sure.

9 Q. Would that be Dr. Toms' op note or your op
10 note?

11 A. I haven't seen it yet.

12 Q. No, that --

13 A. Oh, I'm sorry, that would be mine. I
14 thought that was a trick question.

15 Q. No trick questions here.

16 A. Can I let go of this?

17 Q. Yeah, I've got it.

18 A. All right.

19 Q. We're saying op note, this is an operative
20 note that you dictate based on your surgery, is that
21 right?

22 A. Here we go. Okay. Given the size -- the
23 decision was made to use a burr hole cover over the
24 craniotomy. Okay. So we used a burr hole cover.

25 Q. In other words you used a plate?

1 A. A titanium plate. And, again, these are
2 really small defects and many people wouldn't cover
3 it. That's a minor thing. Many people would have a
4 defect larger than this have nothing covering it.
5 It's just -- the total size, you're talking roughly
6 a centimeter and a half, you know, and at the
7 greatest height two centimeters by two and a half to
8 three total, you know. It's a small defect.

9 Q. Just to give the jury an idea, you're doing
10 all of this with microscopic tools looking into a
11 viewer?

12 A. Absolutely.

13 Q. And then you're -- you use those tools by
14 -- how do you -- like a little stick or thing, how
15 is that done, explain --

16 A. I don't understand.

17 Q. When you're looking down in there you're
18 using tiny little tools that you're looking at
19 through --

20 A. When you're working on the skull base it's
21 all under a microscope, and we use specific
22 instruments for middle ear surgery and neurosurgery.
23 So a combination, depending on what works the best,
24 but a lot along here are neurosurgical instruments,
25 little elevators, an elevator is just basically --

1 how would I explain an elevator -- basically you
2 elevate tissue off some other surface.

3 Q. Pull it off the surface?

4 A. Like a tiny little spatula. So not sharp
5 instruments. And small little forceps that you
6 could see drawn in here. (Indicating.)

7 Q. How do you manipulate those tools?

8 A. By hand.

9 Q. Okay.

10 A. This isn't robotic surgery if that's what
11 you're getting at.

12 Q. I guess that's what I was getting at, like
13 a laparoscopic surgery like you stick something in
14 there and manipulate.

15 A. This isn't looking on a screen with scopes.
16 This is a microscope, not a -- you're thinking of
17 more like a telescope like with laparoscopic belly
18 procedure.

19 Q. So you've got to have a pretty steady hand
20 I take it?

21 A. Yes.

22 Q. I would hope so.

23 A. Well, I wasn't going to be funny about it,
24 but, yes, you would certainly hope so. But in the
25 is scheme of thing if you're an ear surgeon you by

1 definition have to have a steady hand, because most
2 of what I do is much finer and smaller than this
3 repair.

4 Q. Okay. Move forward for us if you could. I
5 think you had talked about removal of that bone
6 plate?

7 A. So this is a demonstration of placing a
8 cartilage graft in the defect where the
9 encephalocele was. There would be a little piece of
10 perichondrium attached that would lay over part of
11 this. And depending on what looked thinner and
12 where I had used bone wax, I would orient it so the
13 connective tissue was covering that as well. And
14 this is a demonstration of that myofacial flap,
15 though it doesn't look quite that big, but it would
16 cover all of that area.

17 And then once that's in place you
18 basically use a fibrin glue to glue everything in
19 place and then put the titanium plate here so the
20 connective tissue and muscle close, so the layer
21 under the skin closes, so the skin closes, and put a
22 little dressing on there.

23 Q. All right. And that ends the surgery part,
24 is that right?

25 A. Correct.

1 Q. Thank you so much. Mr. Newcomb followed up
2 with you on several occasions afterwards in your
3 office, is that right?

4 A. Uh-huh.

5 Q. How did he progress after the surgery?

6 A. He's done well. I still see him, just
7 annually, just to make sure he's doing okay. I saw
8 him last fall and he's done very well. He's not had
9 any problems. Initially he still had some fluid
10 behind his eardrum. We always are concerned about a
11 persistent leak, that resolved. He had imaging
12 which showed no fluid in there. He's not had any
13 further problems. Anything that was bugging him
14 pre-op is gone in terms of his ear.

15 Q. And that's just what you limited your care
16 to, was the repair of the problem inside his skull
17 right there for the ear, is that right?

18 MR. PICKETT: Object to leading.

19 THE WITNESS: I'm sorry?

20 MR. PICKETT: Object to the leading.

21 Q. You could go ahead and answer.

22 A. Well, I'm an ear surgeon, so I'm interested
23 in ear complaints. And this is an interface between
24 a neurosurgical issue and otologic issue and that's
25 why the particular team and the approach.

1 Q. To your knowledge he was seeing other
2 medical doctors for other problems here at
3 Geisinger?

4 A. Yes, but I don't know the details of those
5 because, you know, I'm farmed out to a small
6 component of his concerns.

7 Q. Just a couple of questions about the follow
8 up. I think at one point he was complaining about
9 pain on the right side of his head as opposed to the
10 left side of his head. Do you have any memory of
11 that from the clinical notes, does that stand out to
12 you?

13 A. Not particularly. No, that must have been
14 a long time ago. But it wouldn't have anything to
15 do with the surgery unless he had musculoskeletal --
16 because you're positioned in a certain way, if it
17 was immediately after surgery -- you tell me, was
18 it?

19 Q. The first two clinic visits after surgery.

20 A. It could be that. But otherwise given --
21 it could be anything else. But there would be no
22 direct reason to assume it had anything to do with
23 the surgery or CSF leak which predated that surgery.

24 Q. When you said -- to make sure we
25 understand, when his head is tilted you said it

1 could have been due to a musculoskeletal, just
2 strain in a neck?

3 A. If I have you in a position like this for
4 four hours you're not going to -- you know, if you
5 have any issues with your neck you're going to be
6 sore afterward.

7 Q. If you've got pre-existed arthritis in your
8 neck and you're in that position for four hours?

9 MR. PICKETT: Objection. Objection,
10 leading.

11 A. It's not way over, it's like this. And it
12 could be, but it could be he would have had that
13 anyway. I'm just saying it's not, depending on when
14 he complained of the pain, if you said it was after
15 surgery, sure, it could be from positioning. But
16 you can't have him like this, you know, you have to
17 be able to access the area. But, you know,
18 independently of that it was a short lived issue for
19 him and it's not atypical, whether people have
20 arthritis or not, that from positioning they're
21 going to be sore for a while after. (Indicating.)

22 Q. This was just from the first two clinic
23 visits after the surgery then it didn't appear to be
24 any more trouble.

25 A. All I know is he's been smiling for several

1 years and he was not smiling when I met him.

2 Q. The surgery was a success I take it?

3 A. Uh-huh.

4 Q. Yes. Okay. Will he follow up with you in
5 the future?

6 A. Yeah, I said he's following up next year.

7 It was in this past fall as well, yeah, just to make
8 sure he's doing okay. Most people I follow up for
9 some period of time afterward to make sure there
10 aren't any further issues.

11 Q. At one point I think it may be the third
12 clinic visit you got more fluid off the eardrum.

13 What was the concern there?

14 A. Oh, I mentioned that earlier, we're always
15 concerned about that, that it isn't completely
16 repaired. But you can -- like I said, it takes a
17 while for it to heal in. And in talking with
18 neurosurgery they felt it was probably just healing
19 in, and he's had no further fluid since that time.
20 So it was probably the process of scarring, of those
21 flaps scarring down. You don't heal instantly.

22 Q. It takes a while, doesn't it?

23 A. Yeah, basically you're asking these flaps
24 and grafts to scar down onto the defect. And it
25 assumes there's no residual fluid behind in that

1 space, which there could be.

2 Q. You talk about some of these problems can
3 happen to people spontaneously without any trauma,
4 is that right?

5 A. Uh-huh.

6 Q. In this particular case, based on your
7 knowledge about the history he gave to you and what
8 you observed about where he hit his head there, in
9 your medical opinion within a reasonable degree of
10 medical probability, is it more likely than not that
11 this defect that he had as you refer to it, was it
12 caused by trauma, or did it just happen naturally?

13 A. Honestly that's a tricky question because I
14 don't have a way of knowing. But if it was there
15 before and he had an encephalocele before, what he
16 didn't have before based on his complaints afterward
17 was a CSF leak. So if he had had an encephalocele
18 before you wouldn't necessarily repair it unless it
19 was causing a problem. So independent of whether
20 there was a fracture there or not, I have all the
21 reason based on his symptoms to think that he had a
22 CSF leak subsequent to the trauma, whether or not it
23 was directly caused by a fracture or not. Does that
24 make sense.

25 Q. Well, let me think about that just a

1 second.

2 A. In other words, if you had this soft
3 tissue -- it's a presumption because I have no way
4 of knowing, I'm trying to be as objective as
5 possible. Let's say you had a situation where a
6 patient had some soft tissue herniating through a
7 defect, and then through some force of trauma you
8 shear that and that develops a leak, it's still a
9 leak after a trauma, whether or not it was a
10 fracture and that's when the encephalocele came
11 through.

12 Q. Well, assume that before he came to see you
13 he was driving a truck, 18 wheeler, 40, 60, 70 hours
14 a week, having no problem with inner ear --

15 A. Middle ear.

16 Q. Tinnitus, buzzing?

17 A. Well, that's inner ear. Brain actually, go
18 ahead.

19 Q. Okay. Excuse me --

20 A. No, that's okay. I'm trying -- balancing
21 being technical with being understandable.

22 Q. And assume that on January 20 he gets hit
23 by a forklift.

24 MR. PICKETT: June 20.

25 Q. June 20, 2013, I'm sorry. Hits his head on

1 the hinge on the door frame causing that laceration
2 you see on the left side of his head, and after that
3 continually for the next few days gets worse, even
4 came to Geisinger on June 22 -- June 28 to the ER,
5 or 24, shortly after, within a week after the
6 trauma, he had the, pronounce that word with an O,
7 opacification?

8 A. Opacification, yes.

9 Q. And then Dr. Eckel, do you know Dr. Tim
10 Eckel, he's a family physician?

11 A. I know the name, but I don't get out much.

12 Q. He refers him to you. And I know you can't
13 say with a scientific certainty, but with a
14 reasonable degree of medical certainty is it more
15 likely than not, based on those facts, that this
16 was --

17 A. Right. But I actually did say that this --
18 since the symptoms occurred after it, I think it's
19 very reasonable to assume the CSF leak occurred
20 then. Whether or not there was a pre-existing
21 encephalocele doesn't change things. Because I
22 can't say whether the encephalocele was there or
23 not, or whether it was a true fracture. Either way,
24 there was no symptoms or anything before, and
25 afterward he had these symptoms which were

1 associated with a CSF leak.

2 Q. And I understand what you're saying now.

3 You can't say whether or not the encephalocele and
4 fracture predated the trauma or not. You could just
5 -- in your opinion the spinal --

6 A. A fracture implies trauma. So I would say
7 the encephalocele could occur through a natural
8 defect, not an old trauma.

9 Q. Okay.

10 A. But he could have either been a setup for a
11 CSF leak and then had a trauma which caused the CSF
12 leak, or he had a fracture with an encephalocele and
13 a CSF leak. But either way after the trauma, there
14 was a CSF leak.

15 Q. And it's the trauma that -- if it
16 pre-existed or was caused by the trauma, the spinal
17 fluid leak occurred after the trauma in your
18 opinion?

19 A. Uh-huh.

20 MR. PICKETT: Object to leading.

21 Q. I'm going to try to clear that up. Do you
22 have an opinion whether or not this spinal fluid
23 leak occurred due to a trauma?

24 A. Well, again, since he didn't have the
25 symptoms before, and he had them after, and I'm

1 saying the symptoms are associated with fluid behind
2 the eardrum, that turned out to be CSF, then I would
3 say that the CSF leak was caused by the trauma
4 regardless of whether he was a setup before for
5 underlying encephalocele through a defect, or
6 whether there was an actual fracture through the
7 skull base.

8 Q. Got you. Okay. Thank you. Just a couple
9 more questions. Mr. Newcomb as a patient, did he
10 follow your recommendations and your instructions?

11 A. I believe so. It's hard to -- with all due
12 respect after over three years I don't recall -- put
13 it this way, I don't recall him not following my
14 recommendations.

15 Q. Some patients are what we call
16 noncompliant, is that right?

17 A. I try not to use that term because it's not
18 nice and it's not helpful. But anything I
19 recommended he tended to do. But it's nothing that
20 sticks out in my memory like he should have done
21 this, thus this happened, and ugh, to put it
22 bluntly.

23 MR. HELMS: Okay. Doctor, that's all
24 the questions I have right now. I appreciate it.
25 Mr. Pickett is going to have some questions.

1 THE WITNESS: Sure.

2 * * * *

3 CROSS EXAMINATION

4 * * * *

5 BY MR. PICKETT:

6 Q. Dr. Azeredo, the area that you treated and
7 the area where you could see a healed laceration on
8 Mr. Newcomb, those were both on the left side of his
9 head?

10 A. Correct.

11 Q. Can you reach the exhibit, I wanted to ask
12 you some questions about it.

13 A. Do you want this?

14 Q. No, I'm just going to direct you. These
15 are pictures, drawings that were done to help us
16 orient ourselves and see where things are in
17 relation to each other. As far as size, the
18 drawings are not -- they're not accurate or to
19 scale, are they?

20 A. No, of course not.

21 Q. And one thing in particular, the diagram in
22 the lower left corner, the side view, that's a side
23 view of the right side of a head, of a human head,
24 correct?

25 A. Sure. But it doesn't change the

1 orientation of an incision.

2 Q. Okay. But just to be clear, even though
3 the drawing is of the right side, the procedure you
4 did is actually on the left side?

5 A. Yeah, correct.

6 Q. The drawing just above that, is that a view
7 from the front or from the back?

8 A. A standard medical view says it's from the
9 front.

10 Q. Which would indicate that --

11 A. That this is the left side that we've been
12 talking about, yes.

13 Q. And then the rest of these pictures appear
14 to be of the left side?

15 A. To jive with this.

16 Q. It's just the one on the bottom left that's
17 right, and that one's just --

18 A. Correct.

19 Q. It's just the other side?

20 A. You're correct. This is the right side,
21 which is the incorrect side.

22 Q. It's the wrong side for this procedure in
23 this particular case?

24 A. Exactly.

25 Q. The place where the defect occurs, and I'm

1 referring to --

2 A. Skull based defect?

3 Q. Yes, sir. The dehiscence that's right
4 where the encephalocele is, the drawing shows that
5 area of bone that's fairly broad and wide, is that
6 accurate, or is it actually thinner than that?

7 A. Are you talking about the depth of the
8 bone?

9 Q. Yes.

10 A. Or the area of the defect?

11 Q. The depth of the bone.

12 A. It depends on the patient. In
13 Mr. Newcomb's case in particular it's thinner than
14 that.

15 Q. In some --

16 A. It's typically very thin. But for
17 illustrative purposes certainly things that we
18 review with patients often show it this thick. It's
19 just a question of for clarity for a patient versus
20 being absolutely accurate.

21 Q. But in Mr. Newcomb's case it was actually
22 very thin?

23 A. It is -- was -- it is.

24 Q. And that's not uncommon, you see that in a
25 lot of patients?

1 A. It's not uncommon.

2 Q. Could I go so far to say that it's paper
3 thin and be accurate in some people?

4 A. Paper thin is a little bit too thin in no
5 small part because of just the material of paper
6 versus bone. It's still solid.

7 Q. Right.

8 A. But it can be easily a millimeter thick or
9 less.

10 Q. Okay. And --

11 A. Put it this way, there's some patients
12 where focally you can't see it on a CT scan in
13 spots.

14 Q. You don't see any depth of bone at all in
15 the CT scan?

16 A. Because of the limits of a resolution of a
17 CT scan.

18 Q. The thinness of the bone in that area, is
19 that what lends itself to these spontaneous defects
20 that you talked about earlier?

21 A. Controversial, but that's the presumption,
22 or whatever force is -- people with spontaneous
23 leaks probably wouldn't affect someone if they had
24 thicker bone.

25 Q. And these spontaneous leaks are something

1 that occur in a significant portion of the
2 population?

3 A. No. They're rare. They're not for me
4 because of the patients I see. But I doubt you know
5 anyone that's had a spontaneous leak.

6 Q. Are you familiar with studies that have
7 shown the dehiscence in that area in as much as or
8 as little as -- as much as two percent of the
9 population?

10 A. With what?

11 Q. Two percent of the population?

12 A. What's in two percent of the population?

13 Q. Dehiscence?

14 A. Dehiscence?

15 Q. Dehiscence, excuse me. Dehiscence.

16 A. Of course I am. That doesn't mean you have
17 a leak.

18 Q. But I'm talking about there being an
19 opening in that -- a dehiscence would tell us
20 there's an opening in the area of bone that we're
21 talking about that?

22 A. Of course I'm aware of studies like that.
23 But that's what I'm saying, there are many people
24 whose tegmen's are so thin, and some people who
25 actually -- who postmortem are found to have

1 dehiscence through the skull base, yes.

2 Q. So can we say there is a significant
3 portion of the population that has a dehiscence in
4 that area?

5 A. Sure.

6 Q. Which would be an opening of the bone in
7 that area?

8 A. Right. To clarify it, but not a CSF leak,
9 which is what you were asking me.

10 Q. Okay. So that's two different things.
11 There could be an opening in the bone, but the CSF
12 is not actually leaking?

13 A. You have to have dura compromised in order
14 to have a CSF leak.

15 Q. So we've got three layers between the brain
16 and the external world, is that fair to say, the
17 skull --

18 A. Where are you talking about? In the skull
19 base, are you talking about lateral skull base, or
20 where?

21 Q. That skull base, you've got the skull, the
22 tegmen -- which that's the bone there, the skull
23 bone is call the tegmen in that area, is that right?

24 A. Uh-huh.

25 Q. And then above -- between that, or moving

1 in from that, you have got the dura?

2 A. Okay, yeah, of course.

3 Q. And then inside of that you have got the
4 inner lining of the brain, the word escaped me at
5 the moment, the lining of the brain we talked about
6 a minute ago?

7 A. The meningis.

8 Q. Meningis, thank you. So you have all three
9 of those layers. And unless there's a rupture of
10 the dura and the skull, you're not going to have a
11 CSF leak, is that correct?

12 A. Uh-huh.

13 Q. So you could have an opening in the tegmen
14 which is the skull bone, but not in the dura and not
15 have a CSF leak?

16 A. I'm sorry, say that again, I drifted.

17 Q. You could have an opening -- you could have
18 an opening in the tegmen, in the skull bone?

19 A. Correct.

20 Q. But not in the dura?

21 A. Right. And thus you would not have a CSF
22 leak.

23 Q. And that condition has been seen to occur
24 in a portion of the population in autopsy
25 photographs and --

1 A. The bottom line is two percent of the
2 population may have some small defect in the skull
3 base, but it's far less than two percent of the
4 population that gets a CSF leak.

5 Q. Okay. The people that have that dehiscence
6 or that opening --

7 A. Do you still need this?

8 Q. Yes, just for another minute.

9 A. Okay.

10 Q. Those people are more prone to a CSF leak?

11 A. Unclear.

12 Q. Okay. The question was unclear or the
13 answer?

14 A. No, your question is clear. But it's not
15 -- there are reasons why you could have thin -- it's
16 an area of ongoing research, but that's for a
17 spontaneous CSF leaks which is a different issue.

18 Q. Different issue from what?

19 A. From a traumatic CSF leak.

20 Q. And in this case your opinion is that this
21 CSF leak, even if there was a pre-existing opening
22 in the skull, the CSF leak was caused by the trauma?

23 A. He had no symptoms before associated with
24 fluid behind the eardrum, and that fluid behind the
25 eardrum was bound to be CSF. And once it was

1 repaired those symptoms went away.

2 Q. Okay. The day that you first saw him and
3 made the little incision in his eardrum and checked
4 the fluid and all, that date was July 22, correct,
5 of 2013?

6 A. Sure, again, you've had more recent access
7 to his notes than I have, so that sounds right.

8 Q. By the time you saw him the sutures on his
9 wound had been --

10 A. Removed.

11 Q. And the wound was healed to a degree?

12 A. Uh-huh.

13 Q. Would it be consistent with it having been
14 about a month, about a month or so after the
15 laceration had occurred?

16 A. Sure.

17 Q. So the laceration occurs on June 20 and you
18 first saw him on July 22, that would be consistent
19 with your -- what you observed?

20 A. Uh-huh.

21 Q. The diagram that's labeled B, where it
22 shows, bone removed?

23 A. Uh-huh.

24 Q. And it shows that's the removal of an area
25 for the window that you talked about earlier?

1 A. Right.

2 Q. And that looks like a pretty large disk of
3 bone being removed, but it's actually a very small
4 window that you use, correct?

5 A. Right. As you said, these aren't to scale.

6 Q. That shows a much bigger circle of bone
7 being removed than actually was removed?

8 A. Correct.

9 Q. I'm done with the diagram now if you want
10 to put it down. Thank you for holding it for me.

11 A. Sure.

12 Q. In this case you describe there as -- I
13 believe you said meningoencephalocele -- and there's
14 a standard encephalocele?

15 A. Okay.

16 Q. Is that --

17 A. Close enough.

18 Q. The meningo is where you've actually got
19 brain matter that is recognized as part of the
20 encephalocele?

21 A. Meningoencephalocele.

22 Q. Meningo.

23 A. But, again, I was just clarifying that
24 encephalocele just means herniation of contents from
25 the brain case. It doesn't imply there's

1 necessarily neurons, brain material in there.

2 Q. And in this case what we had was not a
3 meningoencephalocele but an encephalocele?

4 A. Don't know, didn't send a tissue sample
5 because it wouldn't change what we needed to do.

6 Q. Whether or not this -- and the
7 encephalocele is the herniation or the bulge of
8 something inside the skull coming out?

9 A. Uh-huh.

10 Q. And what bulged out may or may not have
11 included any actual neuron, brain matter?

12 A. Correct.

13 Q. We just don't know?

14 A. Either way what herniated through would be
15 nonviable, so it's not -- and that's more -- this is
16 probably -- if you wanted to ask further questions
17 it's probably better to ask that of the
18 neurosurgeon, not me.

19 Q. The size of what came through was
20 relatively small though, correct?

21 A. Uh-huh.

22 Q. Smaller than what we just saw on the
23 diagram?

24 A. And, again, given that the diagrams are
25 illustrative it's, you know -- but I would say that

1 in true size it wouldn't be massively different. If
2 it was relative to this, it's disproportionate. But
3 it's enough so that the defect that it went through
4 was big enough to put a piece of cartilage from here
5 to cover it, and have it covered effectively. So
6 you're talking a defect under a centimeter, but
7 that's still a decent size defect for what's not a
8 very big area.

9 Q. In terms of -- for a south Georgia jury, a
10 centimeter is how much inches?

11 A. It's the other way around, 2.54 if I recall
12 correctly from grade school, centimeters to an inch.

13 Q. So two and a half centimeters make up an
14 inch. So a centimeter is roughly a fifth of an
15 inch, something like that?

16 A. The size of a navy bean. (Indicating.)

17 Q. As far as this, whether this encephalocele
18 included any brain matter, we don't know that?

19 A. No.

20 Q. We talked about meningitis. In this case
21 there was no meningitis?

22 A. No. But keep in mind, the surgery is to
23 prevent meningitis.

24 Q. I understand. But it was successful and
25 there was no meningitis, and he had not had

1 meningitis at any point?

2 A. Since we're very exacting in how we view
3 it, he has not had meningitis.

4 Q. You mentioned that if there are multiple
5 leaks you'll plug them with a bone wax?

6 A. No, no, no. I mentioned if there are
7 multiple defects we'll plug them with bone wax.

8 Q. Multiple defects, multiple openings in
9 the --

10 A. Tegmen.

11 Q. In this case were there multiple openings
12 in the tegmen?

13 A. There were several small ones as I recall.
14 But, again, as you mentioned that's not atypical.
15 But once you have a leak if you're not going to
16 repair the dura you want to plug all the leaks.

17 Q. So we're not talking about one skull
18 fracture opening where brain material came out and
19 had to be cut off and healed, but we're talking
20 about multiple openings?

21 A. That was the main one, and that was by far
22 the biggest one. And then anything, since we don't
23 want to go back in there, any other spot that looks
24 like it could be another source for CSF to go
25 through, we fill with bone wax.

1 Q. But in Mr. Newcomb's case there was a
2 main --
3 A. Encephalocele and defect.
4 Q. Defect where there was an encephalocele?
5 A. Uh-huh.
6 Q. And then there were other smaller defects
7 where there was no encephalocele, there was no brain
8 material coming through?
9 A. Correct.
10 Q. But there was still, because the tegmen was
11 so thin, still some other openings in the skull?
12 A. Uh-huh.
13 Q. And you plug those with bone wax.
14 A. (Witness nodded.)
15 Q. The window of bone you said was so small
16 that you could have larger windows and not need to
17 put anything --
18 A. You're talking about the lateral skull base
19 now? You're talking about here, this window?
20 Q. Yes, the window I believe you said the
21 titanium plate was used?
22 A. Uh-huh.
23 Q. We're talking about titanium plate, how
24 large are we talking, centimeters?
25 A. Well, the titanium is -- the titanium isn't

1 anything to do with the size of the plate, it has to
2 do with it being well tolerated and MRI compatible.

3 Q. What I'm asking you is how large was the
4 plate that you --

5 A. It was a burr hole cover, so it was about
6 that big. (Indicating.)

7 Q. Okay.

8 A. Think of it about the size of a quarter.

9 Q. Okay. And how big is the hole that it's
10 covering?

11 A. Slightly larger. So you don't want to
12 cover the entire hole because you have the muscle,
13 so you don't want to pinch on the muscle tissue and
14 myofacial flap I talked about. So you basically
15 have the plate there, screwed here and here so it's
16 not pinching on that flap and screwed onto the skull
17 superior to the defect. But you're talking about
18 that would cover most of the hole.

19 Q. Was the skull underneath there healed?

20 A. I'm sorry, underneath what?

21 Q. Under the plate?

22 A. It's not a question of healing, it's just
23 screwed in there. I don't understand.

24 Q. Does the skull bone mend itself behind
25 that?

1 A. You mean the defect.

2 Q. No, the window that was taken out, that

3 opening?

4 A. No, it's just dead scar afterward.

5 Q. Okay. Because you take a disk of bone is

6 removed?

7 A. Uh-huh.

8 Q. About half inch or so I guess?

9 A. In diameter.

10 Q. Yes.

11 A. I'm getting confused. Are you talking

12 about the lateral window here?

13 Q. Yes.

14 A. I mentioned earlier, about a centimeter and

15 a half, if you want half an inch by about an inch.

16 It's a triangular shaped piece, probably about that

17 big. (Indicating.)

18 Q. Okay.

19 A. And you put a burr hole cover, which covers

20 most of it. But any time you do a craniotomy there

21 is going to be some small defect and it scars in and

22 there aren't issues. So I'm not sure what the

23 question really is.

24 Q. When you say it scars in, that means the

25 bone fills in around it?

1 A. Sometimes.

2 Q. Okay. And you've had situations where you
3 could see a window of that size that you would
4 require no burr cover at all?

5 A. Yes, and that's what I was talking about
6 with a neurosurgeon is like, yeah, I wouldn't even
7 bother putting that piece of bone back on. And I
8 was like, well, at least I want to put a burr cover
9 on. But again, so since this is the unique
10 situation where I'm involved in making a craniotomy,
11 if you want to talk about a broad series of
12 questions about craniotomies, you're better off
13 talking to the neurosurgeon. We always make small
14 craniotomies, because we don't need a big
15 craniotomy, because what we're trying to do is a
16 very small area.

17 Q. Like you said, you're used to working in
18 small spaces?

19 A. (Witness nodded.)

20 Q. And all of the work that you did, all of
21 the procedures you did for Mr. Newcomb was on the
22 left side of his head?

23 A. Uh-huh.

24 MR. PICKETT: That's all I have.

25 * * * *

1 REDIRECT EXAMINATION

2 * * * *

3 BY MR. HELMS:

4 Q. When you say this burr hole was attached
5 with screws?

6 A. Uh-huh.

7 Q. Just like you would screw a plate over a
8 piece of wood?9 A. I've never screwed a plate over a piece of
10 wood. I'm more confused by that.

11 Q. Okay.

12 A. But it's like any sort of plating system
13 like facial fractures only thinner in that area.

14 Q. I'm just searching for an analogy?

15 A. The simplest way to put it I guess would
16 be, yeah, if you screwed anything else together.
17 Simple screws and you just have different lengths of
18 screws based on how thick the skull is so you don't
19 obviously, you know, have a longer screw than the
20 depth of the skull and you just screw a plate in.

21 Q. Little tiny screws?

22 A. Yeah, like three millimeters, you know,
23 typically, four.24 Q. Screwed through the plate and into the
25 skull?

1 A. Into the bone of the skull.

2 Q. Thank you.

3 A. It's a standard series of plating systems
4 for different types of fractures. And my area it's
5 usually facial fractures, you know, so it's just
6 part -- I guess I never thought of it as odd, but I
7 guess it is.

8 MR. HELMS: That's all the questions I
9 have.

10 MR. PICKETT: Thank you, Doctor.

11 THE VIDEOGRAPHER: The time is 9:24.
12 That concludes this video deposition.

13 (The deposition concluded at 9:24 a.m.)

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5 _____, 2017
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9 I hereby certify that
10 the evidence and proceedings are contained fully and
11 accurately in the notes taken by me of the testimony
12 of the within witness who was duly sworn by me, and
13 that this is a correct transcript of the same.
14
15

16 Justine Starrick
17 Registered Professional Reporter
18 Notary Public
19
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A	51:13 anterior 17:20 anybody 17:2,10 anyway 31:1 37:13 abscess 19:5 absolutely 6:10 7:1 32:12 46:20 Academy 1:16 4:10 access 22:16 23:17 37:17 52:6 accessing 22:6 accurate 14:9 44:18 46:6,20 47:3 accurately 63:10 acquired 16:5,5 21:3 acronym 11:14 activity 27:18 actual 16:17 27:19 43:6 54:11 added 20:20 Address 1:11 adjacent 30:10 affect 47:23 afterward 37:6 38:9 39:16 41:25 59:4 ago 36:14 50:6 ahead 35:21 40:18 air 9:1,3,6,9 11:23 15:14 al 4:6 Albany 1:2 2:9 4:7 Allentown 1:23 altered 7:21 9:17 analogy 61:14 anatomy 14:10 14:23 annually 35:7 answer 35:21	51:13 avenue 1:16 4:10 average 19:20 aware 48:22 axis 24:15 Azeredo 1:14,16 3:2 4:3,23 5:16 44:6	51:13 bathes 10:4 11:13 bean 55:16 begins 22:24 believe 43:11 53:13 57:20 belly 33:17 benefit 29:8 bent 22:16 best 21:10 22:17 32:23 better 22:16 54:17 60:12 big 5:23 23:25 25:20 26:9 34:15 55:4,8 58:6,9 59:17 60:14 bigger 53:6 biggest 56:22 bipolar 13:9 bipolared 27:13 bar 7:6 bare 28:18 base 13:16 15:17 15:17,23,24 16:1,3 17:20 17:20 25:3 26:20 32:20 43:7 49:1,19 49:19,21 51:3 57:18 based 19:8 31:20 39:6,16 39:21 41:15 46:2 61:18 basically 11:19 13:7,9 15:20 16:16 17:22 18:6 20:8,19 assumes 38:25 Assuming 23:22 attached 24:11 25:23 34:10 61:4 attempted 13:12 28:17 atypical 37:19 56:14 autopsy 50:24	51:13 bathes 10:4 11:13 bean 55:16 begins 22:24 believe 43:11 53:13 57:20 belly 33:17 benefit 29:8 bent 22:16 best 21:10 22:17 32:23 better 22:16 54:17 60:12 big 5:23 23:25 25:20 26:9 34:15 55:4,8 58:6,9 59:17 60:14 bigger 53:6 biggest 56:22 bipolar 13:9 bipolared 27:13 bar 7:6 bare 28:18 base 13:16 15:17 15:17,23,24 16:1,3 17:20 17:20 25:3 26:20 32:20 43:7 49:1,19 49:19,21 51:3 57:18 based 19:8 31:20 39:6,16 39:21 41:15 46:2 61:18 basically 11:19 13:7,9 15:20 16:16 17:22 18:6 20:8,19 assumes 38:25 Assuming 23:22 attached 24:11 25:23 34:10 61:4 attempted 13:12 28:17 atypical 37:19 56:14 autopsy 50:24	51:13 bathes 10:4 11:13 bean 55:16 begins 22:24 believe 43:11 53:13 57:20 belly 33:17 benefit 29:8 bent 22:16 best 21:10 22:17 32:23 better 22:16 54:17 60:12 big 5:23 23:25 25:20 26:9 34:15 55:4,8 58:6,9 59:17 60:14 bigger 53:6 biggest 56:22 bipolar 13:9 bipolared 27:13 bar 7:6 bare 28:18 base 13:16 15:17 15:17,23,24 16:1,3 17:20 17:20 25:3 26:20 32:20 43:7 49:1,19 49:19,21 51:3 57:18 based 19:8 31:20 39:6,16 39:21 41:15 46:2 61:18 basically 11:19 13:7,9 15:20 16:16 17:22 18:6 20:8,19 assumes 38:25 Assuming 23:22 attached 24:11 25:23 34:10 61:4 attempted 13:12 28:17 atypical 37:19 56:14 autopsy 50:24
				bottom 22:24 27:21 45:16 51:1 bound 51:25 Box 2:3 brain 10:5 11:13 13:8,14 15:4 15:19,22 16:12 16:14,17 17:25 18:5,8,21 19:5 19:10 20:10,13 27:3,6,19,20 28:23,25 40:17 49:15 50:4,5 53:19,25 54:1 54:11 55:18 56:18 57:7 briefly 6:4 bring 14:19 21:17 broad 46:5 60:11 bugging 35:13 bulge 54:7 bulged 54:10 burr 31:23,24 58:5 59:19 60:4,8 61:4 buzzing 40:16	

C

C 23:25
call 43:15 49:23
called 9:2 11:6
15:3,7 24:4
25:20
canal 15:12
care 7:20 20:18
23:10 35:15
cartilage 12:22
23:5 24:4,6,16
25:9 29:13,20
29:21 34:8
55:4
case 4:7,21
15:18,20 18:19
20:7,17 23:6
25:7 26:2 27:9
28:10,16 30:16
39:6 45:23

46:13,21 51:20 53:12,25 54:2 55:20 56:11 57:1 cases 20:25 27:25 28:19 catheter 21:25 22:9 caused 39:12,23 42:11,16 43:3 51:22 causing 39:19 41:1 cautery 13:9,11 cells 9:1,3,7 11:24 15:14 center 1:22 22:14 centimeter 23:16 32:6 55:6,10,14 59:14 centimeters 23:16 32:7 55:12,13 57:24 cerebral 11:14 22:5 certain 7:4 10:8 20:14 36:16 certainly 33:24 46:17 certainty 41:13 41:14 certification 6:12 7:3 certified 6:9,14 6:21 certify 63:8 CFS 11:12 chance 14:7 chances 19:6 change 41:21 44:25 54:5 checked 52:3 choose 19:4 circle 53:6 circumstance 20:13 clarify 20:5 49:8 clarifying 53:23	clarity 46:19 clean 17:17,18 clear 9:25 10:2 42:21 45:2 51:14 clinic 10:23 36:19 37:22 38:12 clinical 36:11 close 24:17 30:1 34:20 53:17 closer 23:13 closes 34:21,21 cochlea 15:8 colleague 12:9 12:12 collect 11:10 College 2:4 column 22:10,15 combination 9:11 32:23 come 7:20 8:6 10:17 11:9 13:1 17:6,24 26:2 comes 23:15 28:10 coming 26:24 54:8 57:8 commencing 1:17 communication 17:11,13,21 19:18 compatible 58:2 competency 7:4 complained 37:14 complaining 9:12 36:8 complaint 7:21 complaints 7:23 9:15 35:23 39:16 complete 6:15 8:19 16:9 completely 38:15 complex 7:11 component 36:6	compromised 49:13 concern 8:2 17:18 18:6 38:13 concerned 11:10 24:23 35:10 38:15 concerning 10:1 concerns 36:6 concluded 62:13 concludes 62:12 condition 16:23 19:25 50:23 confused 59:11 61:10 congenital 16:5 connect 9:3 connection 23:12 connective 24:10,12 25:19 25:22 26:3 29:20,23 34:13 34:20 connects 17:16 consider 29:21 considered 16:10 19:2 consistent 52:13 52:18 contained 63:9 contents 16:16 16:19 53:24 contiguous 15:14 continually 41:3 Continue 25:16 Controversial 47:21 Cooler 1:6 4:5 4:20 cord 10:5 11:14 15:5 21:23 22:14 corner 44:22 coronal 15:3 correct 5:8,18 8:17 11:18 complex 7:11 component 36:6	44:10,24 45:5 45:18,20 50:11 50:19 52:4 53:4,8 54:12 54:20 57:9 63:12 correctly 55:12 cosmetic 23:19 counsel 4:14 couple 6:12 36:7 43:8 course 7:14,22 10:6 30:6 44:20 48:16,22 50:2 court 1:1 4:6,12 4:15 cover 23:7,22 24:13 26:1 28:23 29:17 31:23,24 32:2 34:16 55:5 58:5,12,18 59:19 60:4,8 covered 26:1 55:5 covering 16:15 18:5 21:23 24:10 26:11 27:3,5 29:21 29:24 31:2 32:4 34:13 58:10 covers 13:13 25:19 28:25 59:19 craniotomies 60:12,14 craniotomy 12:21 31:24 59:20 60:10,15 create 20:8 Creek 1:6,7 4:5 4:20 CROSS 44:3 CSF 10:1,4 11:11,13,22 12:18,21 16:22 17:2,12 18:23 20:21,22,23	22:5,22 24:22 36:23 39:17,22 41:19 42:1,11 42:11,13,14 43:2,3 49:8,11 49:14 50:11,15 50:21 51:4,10 51:17,19,21,22 51:25 56:24 CT 8:18 9:4,8 47:12,15,17 current 13:11 cut 15:4 24:8 27:2 30:2 56:19
D				
danger 18:19 Danville 1:16 4:10 5:7 date 4:1 52:4 day 6:17,17 52:2 days 6:12 41:3 dead 27:16 59:4 decent 55:7 decision 31:23 deep 15:12 defect 13:16 15:22,24 16:6 24:9 25:3,8 27:11,24 31:3 32:4,8 34:8 38:24 39:11 40:7 42:8 43:5 45:25 46:2,10 51:2 55:3,6,7 57:3,4 58:17 59:1,21 defects 16:3 24:6 26:23 32:2 47:19 56:7,8 57:6 defendants 1:12 2:10 4:21 definition 10:8 34:1 degree 39:9 41:14 52:11 dehiscence 46:3 48:7,13,14,15				

48:15,19 49:1 49:3 51:5 delicate 28:25 demonstrated 6:22 demonstration 34:7,14 density 9:5 depending 32:23 34:11 37:13 depends 46:12 depiction 14:12 deponent 4:16 deposition 1:14 4:3,9 5:5,7 10:6 14:21 62:12,13 depth 46:7,11 47:14 61:20 describe 53:12 DESCRIPTI... 3:6 details 36:4 determine 21:4 developing 17:3 19:21 develops 40:8 diagnosis 8:23 11:19 21:5 diagram 3:7 44:21 52:21 53:9 54:23 diagrams 54:24 diameter 59:9 dictate 31:20 different 49:10 51:17,18 55:1 61:17 62:4 differently 23:20 difficulty 8:1 direct 5:1 36:22 44:14 directly 39:23 Discussion 18:13 disk 53:2 59:5 disproportion... 55:2	District 1:1,1 4:6,7 division 1:2 4:7 doctor 5:4,17,17 6:5 12:7 14:18 18:17 43:23 62:10 doctors 6:11 28:1 36:2 DOE 1:11 doing 13:18 32:9 35:7 38:8 door 41:1 doubt 48:4 dozen 13:24 Dr 12:8,23 13:18 20:3 27:13 28:17 31:9 41:9,9 44:6 drain 13:4 20:2 21:1,7,8 22:10 draining 22:7 Drawer 2:8 drawing 45:3,6 46:4 drawings 44:15 44:18 drawn 17:16 33:6 dressing 34:22 drifted 50:16 Drive 1:22 2:8 driving 40:13 drum 8:3 due 37:1 42:23 43:11 duly 4:24 63:11 dura 13:12,12 16:17 20:9 21:23 22:21,22 26:20,22 28:17 28:21 49:13 50:1,10,14,20 56:16 dural 26:11	8:15 9:2,13 10:15,25 11:1 11:16 13:8 15:5,12,19 17:10 19:9,11 19:12,14,15 23:11,12,14,15 26:9 27:1,3,4,6 32:22 33:25 35:14,17,22,23 40:14,15,17 eardrum 9:4,6 9:23,24,24 10:2 11:8,17 11:23 15:8,9 15:15 17:14 19:12,14,15 27:4 35:10 38:12 43:2 51:24,25 52:3 earlier 5:4 14:4 16:22 20:22 27:12 38:14 47:20 52:25 59:14 easier 20:11 easily 10:24 47:8 Eckel 41:9,10 EDDIE 1:9 education 6:22 educational 6:5 effectively 55:5 either 41:23 42:10,13 54:14 electric 13:11 elevate 33:2 elevator 32:25 33:1 elevators 32:25 eligible 6:19 encephalocele 13:6 15:21 16:12,19 27:9 27:20 28:13 29:12 34:9 39:15,17 40:10 41:21,22 42:3 42:7,12 43:5 46:4 53:14,20 53:24 54:3,7	55:17 57:3,4,7 encountered 27:9,12 ends 34:23 enter 18:20 19:9 entire 13:3 27:1 58:12 epidural 22:19 22:20,21 episode 19:7 EQUIPMENT 1:10 ER 41:4 escaped 50:4 ESQ 2:3,7 essentially 17:12 18:4 22:3 et 4:5 eustachian 17:15 evaluation 7:23 everybody 6:25 evidence 8:10 63:9 exacting 56:2 Exactly 45:24 exam 6:17,18,19 8:2 EXAMINATI... 5:1 44:3 61:1 examine 7:15 examined 4:24 excellent 24:5 excuse 40:19 48:15 exhibit 3:6 14:20 44:11 EXHIBITS 3:5 exist 9:2 experience 5:11 explain 6:13 10:10 14:16 18:18 20:3 28:21 32:15 33:1 explained 18:7 EXPORTS 1:7 external 49:16 extremely 17:3	F facets 22:15 facial 61:13 62:5 fact 8:6 facts 41:15 fair 49:16 fairly 7:11 46:5 fall 35:8 38:7 familiar 48:6 family 41:10 far 44:17 47:2 51:3 55:17 56:21 farmed 36:5 FARMS 1:7,8,9 1:9,10,10 fear 17:9 19:7 February 1:17 4:2 feel 10:11 feeling 9:15 felt 38:18 female 22:19 fibrin 34:18 field 5:19 fifth 55:14 figure 29:7 filed 4:6 fill 24:5 25:3 29:12 56:25 filled 15:14 fills 59:25 find 9:18 finer 34:2 FIRM 2:2 first 6:16 7:19 14:22 19:22 25:5 36:19 37:22 52:2,18 fit 24:8 five 6:8 flap 12:22 20:19 23:25 24:12 25:21,24 29:15 34:14 58:14,16 flaps 23:20 38:21,23 floppier 24:19 fluid 8:2 9:4,11 9:24 10:1,4,15
	E	ear 5:25 7:21,22 7:25 8:12,14		

<p>10:17,25 11:4 11:9,13,15,23 16:21 20:7,9 21:22 22:5,10 29:6 35:9,12 38:12,19,25 42:17,22 43:1 51:24,24 52:4 focal 13:10 focally 47:12 folks 15:25 follow 36:7 38:4 38:8 43:10 followed 35:1 following 38:6 43:13 follows 4:24 force 40:7 47:22 forceps 33:5 forklift 40:23 form 21:3 forward 22:23 34:4 fossa 12:21 found 7:23 9:24 10:4 13:6 48:25 four 6:7 37:4,8 61:23 fracture 15:25 39:20,23 40:10 41:23 42:4,6 42:12 43:6 56:18 fractures 31:1 61:13 62:4,5 frame 41:1 free 10:11 front 27:10 45:7 45:9 full 5:15 fullness 9:13,16 fully 63:9 functionally 10:3 funny 33:23 further 24:13 29:8 35:13 38:10,19 54:16 future 38:5</p>	<p style="text-align: center;">G</p> <p>GA 2:4,9 Gallagher 1:21 4:12 Gallagherrep... 1:25 GARDNER 2:7 gauze 26:1 Geisinger 7:9,10 12:10 36:3 41:4 general 8:25 21:1,12 29:18 generic 16:6 gentleman 7:16 9:19 gently 26:22 Georgia 1:1 4:7 55:9 getting 33:11,12 59:11 give 14:12 32:9 given 6:24 8:3 31:22 36:20 54:24 Glenlivet 1:22 glue 29:24 34:18 34:18 go 6:19 10:19 18:9 24:7 31:16,22 35:21 40:17 47:2 56:23,24 going 5:5,6,10 10:7 14:18,19 14:25 18:12,23 22:20,25 33:23 37:4,5,21 42:21 43:25 44:14 50:10 56:15 59:21 grade 55:12 graduated 6:20 graft 12:22 24:7 25:1,15 34:8 grafts 20:19 38:24 graph 24:5 great 27:23 greatest 32:7</p>	<p>guarantee 18:22 guess 33:12 59:8 61:15 62:6,7</p> <p style="text-align: center;">H</p> <p>hair 23:19,22 half 32:6,7 55:13 59:8,15 59:15 hand 33:8,19 34:1 happen 39:3,12 happened 43:21 happier 23:24 hard 43:11 harvest 25:14,21 harvested 29:13 head 8:8,9,11 36:9,10,25 39:8 40:25 41:2 44:9,23 44:23 60:22 heal 38:17,21 healed 44:7 52:11 56:19 58:19 healing 8:7,13 38:18 58:22 healthy 19:1 heard 27:25 hearing 7:22 8:1 9:17 15:7 19:16 height 32:7 held 4:9 18:13 helix 23:14 Helms 2:2,3 4:17,17 5:3,4 18:16 26:14 43:23 61:3 62:8 Helms(Direct) 3:3 Helms(Redire... 3:4 help 14:15 24:12 24:13 44:15 helpful 28:10 43:18 hernia 27:25</p>	<p>28:3,4 herniated 54:14 herniating 13:8 16:20 40:6 herniation 15:22 16:12 53:24 54:7 hide 23:10 hides 23:18 higher 19:20 hinge 41:1 history 8:3,4 39:7 hit 39:8 40:22 Hits 40:25 hold 14:25 15:1 15:2 24:12 29:25 30:10 holding 53:10 hole 10:17 30:14 31:23,24 58:5 58:9,12,18 59:19 61:4 holes 29:9 Homerville 2:4 honestly 13:20 30:14 31:3 39:13 hope 33:22,24 hours 20:21 37:4,8 40:13 human 14:10 44:23</p>	<p style="text-align: center;">I</p> <p>idea 29:18 32:9 identified 18:25 19:25 29:5 identify 21:21 26:23 27:1 illustration 14:4 14:15,21 25:17 illustrative 14:14 46:17 54:25 imagine 10:16 imaging 35:11 immediately 36:17 immune 17:12</p>
---	--	---	--	--

20:15 22:10 24:25 25:10 35:16 50:3 54:8 instance 17:8 instantly 38:21 instructions 43:10 instruments 32:22,24 33:5 interested 35:22 interface 26:20 35:23 interrupt 10:7 involved 21:11 60:10 issue 12:1,1 35:24,24 37:18 51:17,18 issues 13:5 37:5 38:10 59:22 it'll 24:18 J J 1:14 2:3 4:3,23 James 5:16 January 40:22 Jeff 4:17 5:4 Jeffhelms@he... 2:5 JEFFREY 2:3 jive 45:15 JOHN 1:11 July 52:4,18 juncture 27:14 June 40:24,25 41:4,4 52:17 jury 5:10,15 6:4 6:13 10:9 14:16,22 23:2 32:9 55:9 Justine 1:17 4:13 63:15 K Kathy 1:3 4:5 4:18 keep 21:17 26:24 55:22 keeping 20:17	kind 14:22 23:15 28:3 knew 25:9,12 knife 11:6 know 16:25 25:14 27:10 29:4 32:6,8 36:4,5 37:4,16 37:17,25 41:9 41:11,12 48:4 54:4,13,25 55:18 61:19,22 62:5 knowing 39:14 40:4 knowledge 6:23 36:1 39:7 L L 2:7 L&W 1:10 lab 11:18 labeled 52:21 labor 22:20 laceration 41:1 44:7 52:15,17 lacerations 8:7,9 8:13 laparoscopic 33:13,17 large 7:11,12 28:13 53:2 57:24 58:3 larger 29:13 31:2 32:4 57:16 58:11 lateral 15:15,17 17:20 27:1 49:19 57:18 59:12 LAW 2:2 lay 34:10 layer 13:13 24:10 28:22,23 29:19,22,22 34:20 layers 25:2 49:15 50:9 leading 18:1,3 22:11 35:18,20	37:10 42:20 leak 11:22 12:18 12:22 16:21 17:2,19,24 18:23 24:22,23 29:6 35:11 36:23 39:17,22 40:8,9 41:19 42:1,11,12,13 42:14,17,23 43:3 48:5,17 49:8,14 50:11 50:15,22 51:4 51:10,19,21,22 56:15 leaking 49:12 leaks 21:2,6 47:23,25 51:17 56:5,16 LEASING 1:10 leave 19:2 left 7:22 8:16 9:13 15:5 22:24 36:10 41:2 44:8,22 45:4,11,14,16 60:22 lends 47:19 lengths 61:17 let's 5:14 25:14 40:5 letting 20:18 lift 26:22 lightly 17:1 limited 35:15 limits 47:16 line 27:21 51:1 lining 16:15 18:5 28:25 29:2 50:4,5 little 10:19 24:3 24:9,12,18 26:21 30:2 32:14,18,25 33:4,5 34:9,22 47:4 48:8 52:3 61:21 lived 37:18 LJA 1:4 LLC 1:7,8,9,9	1:10,10,21 location 19:8 long 18:25 21:15 36:14 longer 61:19 look 24:19 31:7 34:15 looked 23:24 25:11 34:11 looking 8:1 26:19 32:10,17 32:18 33:15 looks 24:17 53:2 56:23 lot 23:23 32:24 46:25 lower 44:22 LP 1:10 lumbar 13:4 21:1 M M.D 1:14,16 4:4 4:23 main 56:21 57:2 making 9:22 20:10 60:10 malleable 24:8 manipulate 33:7 33:14 Mark 2:7 4:19 mark.pickett... 2:9 marked 14:20 massively 55:1 mastoid 9:2 11:23,24 15:11 19:19 27:5 material 9:5 24:5 47:5 54:1 56:18 57:8 matter 4:4 53:19 54:11 55:18 mean 8:10 12:15 17:23 25:10 27:20 28:3 48:16 59:1 means 5:24 6:13 6:20,21 8:25 9:1,8 10:13	53:24 59:24 medially 26:25 medical 5:17,19 6:7 7:11,12 11:25 14:4 36:2 39:9,10 41:14 45:8 medications 20:14 meet 7:19 memory 36:10 43:20 mend 58:24 meningeal 16:18 meninges 16:17 18:5 28:23,24 meningis 50:7,8 meningitis 17:3 17:6,7 18:4,6 18:18,23 19:5 19:8,23 29:2 55:20,21,23,25 56:1,3 meningo 53:18 53:22 meningoencep... 53:13,21 54:3 mentioned 27:12 38:14 56:4,6,14 59:14 met 5:4 38:1 Michael 1:3 4:4 4:18 7:16 microscope 10:21,23 11:1 26:19 32:21 33:16 microscopic 32:10 middle 1:1 4:6 12:21 19:14 26:25 27:4 32:22 40:15 Mill 1:22 millimeter 47:8 millimeters 61:22 mind 55:22 mine 12:12
---	--	---	---	---

31:13 mini 30:9 minor 32:3 minute 50:6 51:8 moment 50:5 monitored 20:24 month 52:14,14 move 22:23 34:4 moved 12:11 moving 19:24 49:25 MRI 58:2 multiple 56:4,7 56:8,8,11,20 muscle 25:20,20 25:23 26:3 28:1 29:23,23 34:20 58:12,13 musculoskeletal 36:15 37:1 myelocele 16:18 myofacial 12:22 34:14 58:14 myringotomy 9:20,21 11:6	neural 27:17 neuron 54:11 neurons 54:1 neurosurgeon 12:4 21:11,19 54:18 60:6,13 neurosurgery 20:6 32:22 38:18 neurosurgical 32:24 35:24 never 61:9 62:6 Newcomb 1:3,4 4:4,5,18,18 5:11 7:17 12:20 13:17,23 14:10 20:1 35:1 43:9 44:8 60:21 Newcomb's 28:16 46:13,21 57:1 nice 43:18 nodded 57:14 60:19 non-functional 28:12 noncompliant 43:16 nonfunctional 27:17 nonviable 13:7 27:14,15 54:15 normal 8:1 16:10 North 1:16 2:4 4:10 nose 5:25 17:17 17:19 Notary 63:16 notation 23:5 note 31:6,9,10 31:19,20 notes 36:11 52:7 63:10 notice 24:20 nub 24:4 numbed 11:8 number 4:7 14:20	numbing 9:23 <hr/> O object 18:1,3 35:18,20 42:20 Objection 22:11 37:9,9 objective 40:4 observe 10:20 observed 39:8 52:19 obvious 16:21 obviously 12:18 22:1 24:22 61:19 occasions 35:2 occur 18:20 42:7 48:1 50:23 occurred 41:18 41:19 42:17,23 52:15 occurs 45:25 52:17 odd 62:6 office 1:22 35:3 offices 1:16 Oh 12:14 31:13 38:14 okay 5:12 10:9 19:24 23:1,7 24:21 25:14,16 26:15 27:6,7 28:15 29:3 30:20 31:22,24 33:9 34:4 35:7 38:4,8 40:19 40:20 42:9 43:8,23 45:2 47:10 49:10 50:2 51:5,9,12 52:2 53:15 58:7,9 59:5,18 60:2 61:11 old 42:8 once 6:15 10:7 13:21 18:24 21:16,24 25:10 25:12,18 27:11 29:6 34:17	51:25 56:15 one's 45:17 one-third 7:13 ones 12:15 29:10 56:13 ongoing 51:16 op 31:6,9,9,19 opacification 8:20,21,25 9:1 9:6 41:7,8 open 21:15 opening 48:19 48:20 49:6,11 50:13,17,18 51:6,21 56:18 59:3 openings 56:8 occur 18:20 42:7 48:1 50:23 occurred 41:18 41:19 42:17,23 52:15 occurs 45:25 52:17 odd 62:6 office 1:22 35:3 offices 1:16 Oh 12:14 31:13 38:14 okay 5:12 10:9 19:24 23:1,7 24:21 25:14,16 26:15 27:6,7 28:15 29:3 30:20 31:22,24 33:9 34:4 35:7 38:4,8 40:19 40:20 42:9 43:8,23 45:2 47:10 49:10 50:2 51:5,9,12 52:2 53:15 58:7,9 59:5,18 60:2 61:11 old 42:8 once 6:15 10:7 13:21 18:24 21:16,24 25:10 25:12,18 27:11 29:6 34:17	PAGE 3:1,6 pain 36:9 37:14 paint 9:23 paper 47:2,4,5 paraffin 29:11 part 6:17 7:24 16:7,8 20:6,18 34:10,23 47:5 53:19 62:6 particular 20:7 26:6 27:8 35:25 39:6 44:21 45:23 46:13 particularly 36:13 partly 20:16 pass 6:18,19 patch 11:7 patching 29:9 pathway 18:7 patient 16:24 19:4,20 24:18 26:17 40:6 43:9 46:12,19 patients 20:17 21:4,5 43:15 46:18,25 47:11 48:4 pedicled 25:24 Pennsylvania 1:17 4:10 7:13 people 6:18 12:17 16:2 19:17 21:1 23:20 32:2,3 37:19 38:8 39:3 47:3,22 48:23,24 51:5 51:10 percent 48:8,11 48:12 51:1,3 percentage 6:18 performing 12:24 perichondrium 24:11,16 34:10 period 38:9 persistent 35:11 perspective 27:2
---	---	--	--	--

pertinent 15:20	plugged 9:15	26:8 31:4	34:21 43:12,21	43:19
photographs	plugging 29:19	38:18,20 47:23	47:11 53:10	record 4:15
50:25	plus 8:5	54:16,17 59:16	55:4 57:17	18:10,12,13,15
physician 5:11	point 11:20,25	problem 8:24	59:19 60:8	REDIRECT
41:10	13:6,14 14:3	11:21 18:24	61:15	61:1
pick 14:18	26:24 28:12,16	35:16 39:19	putting 9:23	reduce 20:14,21
Pickett 2:7,7	29:4 36:8	40:14	60:7	20:24
4:19,19 18:1,3	38:11 56:1	problems 35:9	reducing 22:7	
18:9 22:11	population 48:2	35:13 36:2	refer 39:11	
35:18,20 37:9	48:9,11,12	39:2	referring 15:16	
40:24 42:20	49:3 50:24	procedure 33:18	46:1	
43:25 44:5	51:2,4	45:3,22	refers 41:12	
60:24 62:10	portion 13:7	procedures	regardless 16:4	
Pickett(Cross)	48:1 49:3	60:21	43:4	
3:3	50:24	proceeded 13:15	Registered 1:18	
picking 26:15	position 37:3,8	proceedings	63:16	
pictures 44:15	positioned 36:16	63:9	relation 44:17	
45:13	positioning	process 14:13,24	relative 29:1	
piece 24:17 34:9	37:15,20	17:6 18:19	55:2	
55:4 59:16	positive 11:18	21:20 22:24	relatively 8:1	
60:7 61:8,9	possible 23:10	38:20	54:20	
pinch 58:13	40:5	produce 1:7	release 20:20	
pinched 28:7	post-op 20:18	20:22	relevant 8:23	
pinching 58:16	postdated 8:8	productive	remember	
place 24:13	posterior 15:12	13:15	13:20 15:13	
29:25,25 34:17	23:12 27:4	Professional	30:18	
34:19 45:25	postmortem	1:18 63:16	removal 34:5	
placed 30:7	48:25	progress 35:5	52:24	
placement 13:4	practice 7:8,14	prone 51:10	remove 13:9	
placing 24:25	pre-existed 37:7	pronounce 41:6	removed 52:10	
34:7	42:16	PROPERTIES	52:22 53:3,7,7	
Plaintiff 14:20	pre-existing	1:8	59:6	
Plaintiffs 1:5 2:5	41:20 51:21	protect 26:1	repair 12:21	
PLAIRE 2:7	pre-op 35:14	protein 10:3	13:12,16 28:17	
plane 15:13	predated 36:23	Public 63:16	28:19,20 34:3	
plate 16:10 30:2	42:4	pull 24:24 27:21	35:16 39:18	
30:12,15,16,23	pregnant 22:19	27:22 28:14	56:16	
31:2,25 32:1	prepared 27:11	33:3	repaired 17:7,22	
34:6,19 57:21	prepped 25:13	pulled 22:2	38:16 52:1	
57:23 58:1,4	pressure 20:15	pulsatile 7:25	repairing 24:23	
58:15,21 61:7	20:20,21 22:7	9:25 10:2,12	replace 30:12	
61:9,20,24	presumption	10:14	report 30:19	
plates 30:9,10	40:3 47:21	pulse 10:15	reporter 1:18	
plating 61:12	pretty 10:23	pulsing 10:13,14	4:13,15 63:16	
62:3	25:6 33:19	pump 10:18	Reporting 1:21	
please 4:14 5:15	53:2	purposes 15:18	4:12	
6:4	prevent 55:23	16:4 46:17	represent 4:20	
plenty 20:22	probability	put 20:19 21:8	representation	
plug 24:24 56:5	39:10	29:9 30:11	14:9	
56:7,16 57:13	probably 21:10	31:1,2 34:19	represents	

15:21	saw 9:12 35:7 52:2,8,18 54:22	send 11:10 54:4 sense 9:17 25:8 25:16 39:24	sitting 26:17 situation 40:5 60:10	sorry 11:3 18:2 31:13 35:19 40:25 50:16 58:20
require 60:4	saying 31:19 37:13 42:2 43:1 48:23	sent 10:3 14:4 separate 24:14 27:23	situations 60:2 size 24:9 25:8 31:22 32:5	sort 10:18 17:11 25:21 61:12
research 51:16	says 45:8	separated 28:14 separating 27:3	44:17 54:19 55:1,7,16 58:1 58:8 60:3	sound 7:25 10:13,14
residency 6:8,15 6:20	scale 44:19 53:5	separation 15:19 27:5	skin 34:21,21 skull 13:16	sounds 52:7 source 24:5 56:24
residual 30:21 38:25	scan 8:18 9:4,8 47:12,15,17	series 21:9 60:11 62:3	15:15,17,17,22 15:24 16:1,3,7	south 55:9 space 9:3 13:8 15:8,15,19,20 16:16,19 17:12
resolution 47:16	scar 8:10 23:10 23:24 38:24 59:4	serious 16:23 serves 7:12 Set 30:5	17:20,20 23:13 25:3 26:4,7,20	17:14,16,17
resolved 35:11	scarring 38:20 38:21	setting 20:24 setup 42:10 43:4	26:25 30:2,10 32:20 35:16	18:8 19:12,19
respect 43:12	scars 59:21,24	SF 1:7,7 shallow 19:13	43:7 46:2 49:1 49:17,18,19,21	19:22 20:8,11 20:15 21:22
rest 45:13	scheduled 12:2	shape 23:25 shaped 25:21 59:16	49:21,22 50:10 50:14,18 51:2	22:1,4,22 27:3 39:1
retraction 20:13	scheme 33:25	sharp 33:4 shear 40:8	51:22 54:8 56:17 57:11,18	spaces 26:10 60:18
review 14:7 46:18	school 6:7 55:12	short 37:18 shortly 41:5	58:16,19,24 61:18,20,25	spatula 33:4 specialty 5:19 5:21
right 7:5,8 9:14 11:2 12:5,23 14:3,5 16:8,11 19:3,24 22:23 23:14 25:4 31:18,21 34:23 34:24 35:3,17 35:17 36:9 39:4 41:17 43:16,24 44:23 45:3,17,20 46:3 47:7 49:8 49:23 50:21 52:7 53:1,5	scientific 41:13 scopes 33:15 SCOTT 1:8,8,9 1:9,11 screen 33:15	show 46:18 showed 35:12 shown 48:7 shows 46:4 52:22,24 53:6	showed 35:12 shown 48:7 shows 46:4 52:22,24 53:6	specific 32:21 specifically 30:18
risk 17:2 18:24 18:25 19:20,22 29:8	screwing 30:23 screws 61:5,17 61:18,21	side 8:8,16 23:13 25:14	11:5,7 13:7 15:21 24:14 26:7,10,23	spinal 10:5 11:14,15 15:5 21:22,23 22:5
risks 19:5	se 16:14 27:19	searching 61:14 second 18:10 20:18 40:1	30:14,22 31:3 32:2,8 33:5 36:5 47:5 51:2 44:8,22,22,23	22:10,14,15 42:5,16,22
robotic 33:10	secondarily 24:3	second 18:10 20:18 40:1	53:3 54:20 56:13 57:15	spine 22:9
roll 25:25	secure 24:13	see 8:10 10:19	59:21 60:13,16 60:18	spontaneous 21:2,6 47:19 47:22,25 48:5
room 12:24,25 13:25 20:8	secondarily 24:3	significant 17:4	smaller 29:10 34:2 54:22	51:17
root 23:15	secure 24:13	19:22 48:1 49:2	57:6	spontaneously 39:3
roughly 7:13 32:5 55:14	see 8:10 10:19	similar 13:23 28:5 29:11	smiling 37:25 38:1	spot 29:5 56:23 spots 47:13
Run 1:22	10:23 11:9	Simple 61:17 simplest 61:15	snip 24:16 soft 9:5,10 40:2	spread 13:10
running 20:23	13:5 15:6	Simplified 17:23 simply 29:10	40:6	Spring 1:6,7 4:5 4:20
runs 22:14	23:14,25 26:4	sir 5:15 16:11	solid 47:6	stable 24:6
rupture 50:9	26:10,23 33:6	19:24 46:3	somewhat 9:25 17:16	stand 36:11
<hr/>	35:6 40:12	site 16:21 28:17	sore 37:6,21	standard 23:11 45:8 53:14
S	41:2 44:7,16 46:24 47:12,14			
sacred 17:13	48:4 60:3			
safe 20:17	seeing 36:1			
safely 27:24	seen 8:6 31:11			
saline 26:1	50:23			
sample 54:4				

62:3	21:19 23:4	talk 27:25 28:1	63:10	tinnitus 10:14
standardized	26:15 28:14	39:2 60:11	thank 7:7 19:24	40:16
7:1	29:5 31:8 35:7	talked 5:5 6:11	35:1 43:8 50:8	tiny 32:18 33:4
Starrick 1:17	36:24 37:15	8:18 16:22	53:10 62:2,10	61:21
4:13 63:15	38:8,9 44:1,25	29:16 34:5	thereof 9:11	tips 13:10
started 5:14	49:5 52:6,16	47:20 50:5	thick 46:18 47:8	tissue 9:5,10
state 4:14 7:13	53:11 59:22	52:25 55:20	61:18	16:12 21:17
16:10	surface 33:2,3	58:14	thicker 47:24	24:10,12 25:19
States 1:1 4:6	surgeon 6:1	talking 14:23	thin 25:22 30:25	25:22 26:3
stay 12:24	33:25 35:22	15:9,11 19:13	46:16,22 47:3	27:14 28:1
stayed 12:25	surgeons 26:9	32:5 38:17	47:4,4 48:24	29:21,23,24
steady 33:19	surgeries 12:13	45:12 46:7	51:15 57:11	33:2 34:13,20
34:1	13:23	48:18,21 49:18	thing 28:2 32:3	40:3,6 54:4
sterilely 22:1	surgery 12:2,5	49:19 55:6	32:14 33:25	58:13
30:6	12:20,24 14:24	56:17,19 57:18	44:21	titanium 30:9,11
stick 11:1,3	16:25 19:1	57:19,23,24	things 29:19	30:14,16 31:2
32:14 33:13	20:4 22:25	58:17 59:11	41:21 44:16	32:1 34:19
sticks 43:20	31:20 32:22	60:5,13	46:17 49:10	57:21,23,25,25
stock 27:13,18	33:10,13 34:23	team 14:1 35:25	think 9:13 13:18	today 4:1
stop 26:13	35:5 36:15,17	technical 9:16	14:3 19:25	tolerated 58:2
straight 23:16	36:19,23,23	10:10 21:18	22:17,18,24	Toms 12:8,23
23:24	37:15,23 38:2	40:21	34:5 36:8	13:18 20:3
strain 37:2	55:22	Technically	38:11 39:21,25	27:13 28:17
Street 2:4	surgical 6:3 12:1	12:19	41:18 58:8	Toms' 31:9
stuck 22:9	14:13	tegmen 27:2	thinking 33:16	tongue 25:21
studies 48:6,22	suspected 16:21	49:22,23 50:13	thinned 13:14	tools 32:10,13
stuff 13:13	suture 22:2	50:18 56:10,12	thinner 34:11	32:18 33:7
stylet 21:16,18	sutures 52:8	57:10	46:6,13 61:13	top 8:11
subsequent	swear 4:15	tegmen's 48:24	thinness 47:18	topical 9:23
39:22	SWEAT 2:7	telescope 33:17	third 38:11	total 32:5,8
subsequently	sworn 4:24	tell 5:10,23 6:4	thoroughly 29:7	totally 29:11
12:14 13:22	63:11	9:21 30:24	thought 31:14	tough 13:13
subspecialty 6:3	symptoms 39:21	36:17 48:19	62:6	tougher 13:13
substance 25:23	41:18,24,25	telling 5:14	thread 21:24,25	28:22
success 38:2	42:25 43:1	temporalis	28:18	track 18:8
successful 55:24	51:23 52:1	25:20	32:8 30:19	tracking 19:21
suction 11:9	system 7:12 15:6	tend 23:9 26:5	49:15 50:8	tragal 12:22
sufficient 6:23	61:12	tended 43:19	61:22	tragus 24:4,15
Suite 1:22	systems 62:3	tends 24:6	throat 5:25	transcript 63:12
superficial		term 9:16 16:6	Thursday 1:17	trauma 8:7,8
22:21	T	29:1,1 43:17	tilted 36:25	16:5 21:3 39:3
superior 8:12,14	T 1:9	terms 10:10	Tim 1:18 4:11	39:12,22 40:7
58:17	T&L 1:8	18:17 21:19	41:9	40:9 41:6 42:4
supply 25:1,25	take 6:16 20:7	22:13 27:17	time 4:2,13 13:3	42:6,8,11,13
27:16 28:11	21:18 31:7	35:14 55:9	18:11,14 20:12	42:15,16,17,23
suppose 28:9	33:20 38:2	TERRIL 1:8,8	36:14 38:9,19	43:3 51:22
supposed 9:9	59:5	1:11	traumatic 51:19	traumatic 51:19
16:9 17:21	taken 1:16 4:4	test 6:24 7:2	treat 7:15	treated 44:6
sure 6:7,15	5:7 59:2 63:10	testified 4:24	62:11	triangular 59:16
14:17 20:5	takes 38:16,22	testimony 14:16	times 13:17,24	

trick 31:14,15	51:12	18:12,15 26:16	55:11 61:15	31:4 32:2
tricky 39:13	uncommon	62:12	we'll 23:6 56:7	36:14 39:18
trochar 21:12	19:17 46:24	videographer	we're 5:6 11:10	47:23 54:5
21:14,25	47:1	1:18 4:1,11	14:3,23 26:9	55:1 60:6
trouble 37:24	undergo 19:1	18:11,14 62:11	26:10,19 31:19	wound 52:9,11
truck 40:13	underlying 21:5	videotape 1:14	38:14 48:20	written 6:17
true 41:23 55:1	43:5	4:3 5:7	56:2,17,19	wrong 9:19
try 10:10 23:10	underneath	view 15:3 16:3	57:23 60:15	45:22
30:13 31:1	10:16,18 58:19	26:18 44:22,23	we've 6:11 11:7	X
42:21 43:17	58:20	45:6,8 56:2	45:11 49:15	
trying 20:10	understand 7:7	viewer 32:11	week 40:14 41:5	Y
21:4,12 22:17	18:18 21:20	visit 38:12	went 52:1 55:3	yeah 8:12 10:21
26:25 28:19	26:17 32:16	visits 36:19	weren't 13:5	23:8 25:12
40:4,20 60:15	36:25 42:2	37:23	Westgate 2:8	28:8 31:17
TS 1:10	55:24 58:23	visualization	wheeler 40:13	38:6,7,23 45:5
tube 17:15	understandable	20:16	white 26:11	50:2 60:6
tubing 22:3	40:21	visualize 26:3	28:22	61:16,22
tunnel 24:15	understanding	visualizing	wide 46:5	year 6:16 38:6
26:21	19:4	20:12	William 1:14,16	years 6:7,8 8:5
turned 29:17	undertake 16:25	volume 19:15	3:2 4:3,23 5:16	30:19 38:1
43:2	29:9	20:24	WILLIS 2:7	43:12
twice 10:13	undertook	vs 1:5	window 20:11	
two 6:17 13:10	14:13		26:7,8,9 52:25	Z
22:15 23:16	unfortunately		53:4 57:15,19	
27:22 32:7,7	11:25		57:20 59:2,12	0
36:19 37:22	unique 60:9		60:3	
48:8,11,12	United 1:1 4:6		windows 57:16	1
49:10 51:1,3	Unknown 1:11		witness 3:1,1	1 3:7 14:20
55:13	1:11		18:2 35:19	1:15-CV-00080-
type 19:12	unnatural 17:11		44:1 57:14	1:4
types 21:2 62:4	18:7 19:18		60:19 63:11	1:15-CV-0008...
typical 10:1	unusual 7:24		wood 61:8,10	4:8
typically 28:18	use 10:8,11		word 5:23 41:6	10 2:4
46:16 61:23	14:21 20:14		50:4	100 1:16,22 4:9
	21:1 22:13		words 10:8	1275 1:22
	24:24 25:2,6		31:25 40:2	15 3:7 13:24
ugh 43:21	29:10,24 30:9		work 13:2 17:8	16 1:17 4:2
Uh-huh 5:9,13	30:13,14,15,16		60:20	18 40:13
5:20 8:22 12:6	30:21 31:4,23		worked 13:1,18	18106 1:23
14:2,6 30:4	32:13,21 34:18		13:22	
35:4 38:3 39:5	43:17 53:4		working 14:1	2
42:19 49:24	usually 62:5		32:20 60:17	2.54 55:11
50:12 52:12,20			works 32:23	20 40:22,24,25
52:23 54:9,21			world 17:14	52:17
57:5,12,22			49:16	2013 40:25 52:5
59:7 60:23			worse 19:5 41:3	2017 1:17 4:2
61:6			worth 28:19	63:5
ultimately 7:25			30:22	22 41:4 52:4,18
9:18 17:15			wouldn't 7:5	24 41:5
unclear 51:11			22:13 23:25	2408 2:8

28 41:4

3

31634 2:4

31707 2:9

4

40 40:13

44 3:3

5

5 3:3

537 2:3

6

60 40:13

61 3:4

610)439-0504/...

1:24

7

70 40:13

71788 2:8

8

8:16 1:17 4:2

8:33 18:11

8:34 18:14

9

9:24 62:11,13